

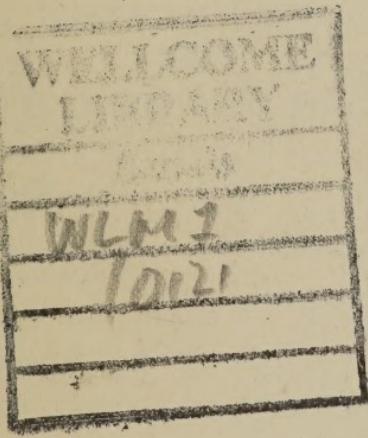


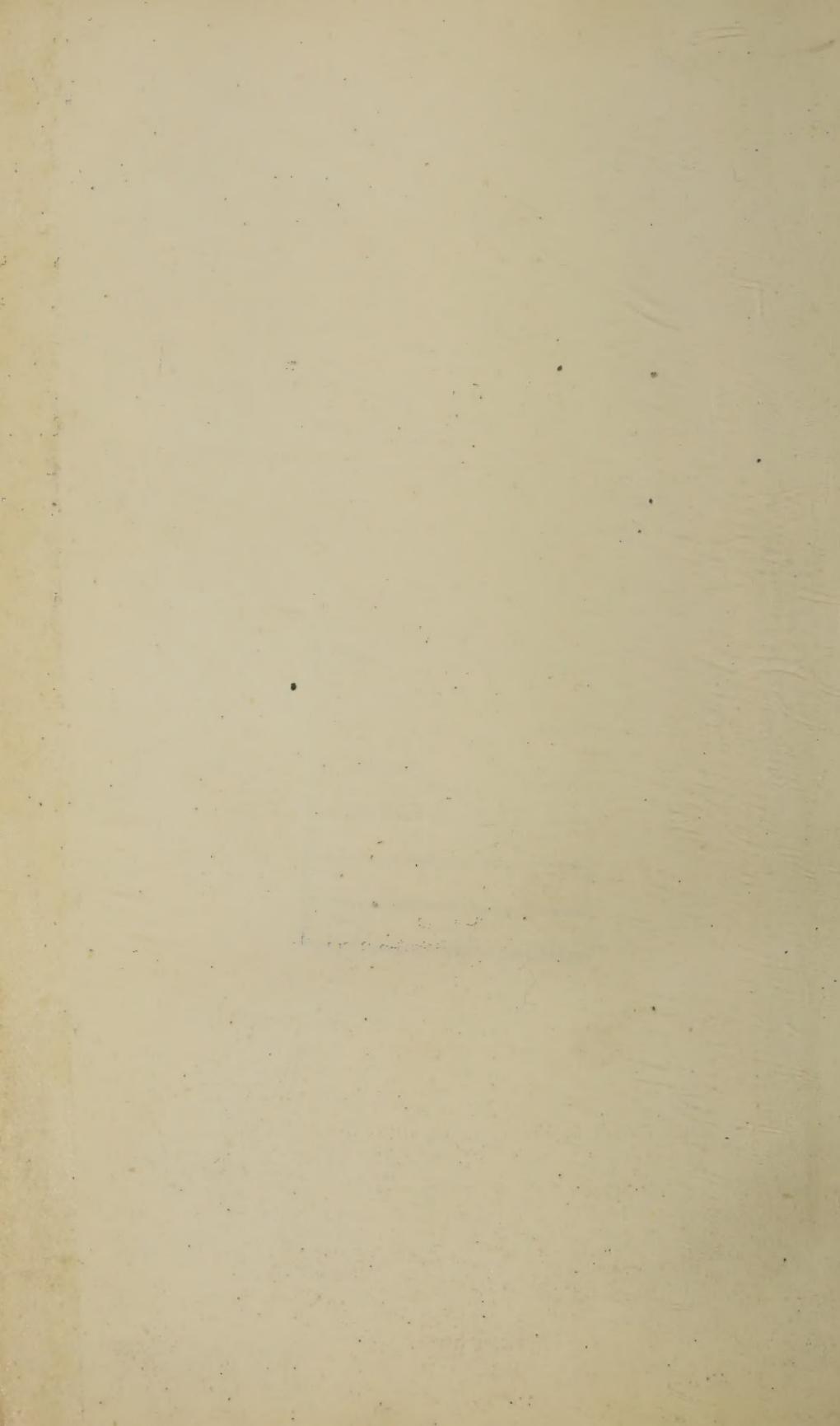
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EDITED BY

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AND
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"Nos vero intellectum longius a rebus non abstrahimus quam ut rerum imagines et
radii (ut in sensu fit) coire possint."

FRANCIS BACON, Proleg. Instaurat. Mag.

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"IN adopting our title of the *Journal of Mental Science*, published by authority of the Medico-Psychological Association, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease are not less questions of mental science in its practical, that is, in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow men, may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*J. C. Bucknill, M.D., Lond., F.R.S., Lord Chancellor's Visitor.*

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CONTENTS.

PART I.—ORIGINAL ARTICLES.

	PAGE.
C. Lockhart Robertson, M.D. Cantab.—On the alleged Increase of Lunacy	1
G. Fielding Blandford, M.D. Oxon.—On Insanity without Delusions	23
Alexander Robertson, M.D.—Notes of a Visit to American Asylums	49
J. W. Eastwood, M.D. Edin.—On Medico-Legal Uncertainties	90
Frederic Bateman, M.D.—On Aphasia or Loss of Speech in Cerebral Disease	102
S. W. D. Williams, M.D.—On a case of Syphilitic Insanity.	119
Occasional Notes of the Quarter.—Actions for alleged False Imprisonment in an Asylum.—Epileptic Homicide.—The Structure of the Cerebral Convolu- tions.—Dr. A. O. KELLOGG on the Non-restraint System.—St. Luke's Hospital for Lunatics	127—143

PART II.—REVIEWS

1. Researches on the intimate Structure of the Brain, human and comparative.
Second series on the Structure of the Medulla Oblongata. By J. Lockhart
Clarke, Esq., F.R.S., Philosophical Transactions, pt. i, 1868
2. Researches on the intimate Structure of the Brain. First Series. Philos:
Trans: pt. 1, 1868
3. The Grey Substance of the Medulla Oblongata and Trapezium. By John
Dean, M.D. Washington, 1864
4. Microscopic Anatomy of the Lumbar Enlargement of the Spinal Cord. By
John Dean, M.D. Cambridge, U.S., 1861
5. Researches into the Structure of the Spinal Cord. By J. Lockhart Clarke,
Esq., F.R.S. Philosop. Transact. 1851, 1853, 1859
6. Illustrations of Diseases of the Nervous System. By J. Hughlings Jackson,
M.D. London Hospital Reports, 1864 and seq. 144

PART III.—QUARTERLY REPORT ON THE PROGRESS OF
PSYCHOLOGICAL MEDICINE.

- Note by the Editors 156

PART IV.—PSYCHOLOGICAL NEWS.

- Proceedings at the Second Quarterly Meeting of the Medico-Psychological Association, held at the Royal Medico-Chirurgical Society, Thursday, January 28th, 1869, under the Presidency of W. H. O. Sankey, Esq., M.D.—The Memorial of a Committee of the Medico-Psychological Association.—Correspondence.—Books received.—Appointments.—Obituary: The late William Ley, Esq.—Notice of the Third Quarterly Meeting of the Medico-Psychological Association, to be held April 29th 155—168

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The following *EXCHANGE JOURNALS* have been regularly received since our last publication:—

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VOL. XV.

PART 1.—ORIGINAL ARTICLES.

The Alleged Increase of Lunacy. By C. LOCKHART ROBERTSON, M.D., Cantab., F.R.C.P., Ex-President of the Medico-Psychological Association.

(Read at the Second Quarterly Meeting of the Medico-Psychological Association, held at the Royal Medico-Chirurgical Society, January 28th, 1869.)

"We have not found any reasons supporting the opinion generally entertained that the community are more subject than formerly to attacks of Insanity."—*Fifteenth Report of the Commissioners in Lunacy to the Lord Chancellor, 1861.*

THE ALLEGED INCREASE OF LUNACY is a frequent theme of discussion in the public press, as also a subject of anxious enquiry in society, and there is hardly a board-room of any county asylum in which the question is not raised with the practical intent of determining the amount of provision to be made for the care and treatment of the insane poor. I have, in order to satisfy such enquiries on the part of the Visitors of the Haywards Heath Asylum, recently endeavoured to see if our existing statistical records afford any means of solving this pressing question, IS LUNACY ON THE INCREASE IN OUR GENERATION?

I venture to think the opportunity of this second quarterly meeting of the Medico-Psychological Association, for scientific discussion, may fitly be used for the farther sifting of this important State question. I shall, with this intent, submit to your critical examination the figures and results with which my enquiry into the alleged increase of Lunacy has furnished me.

Such an enquiry may be based on two distinct conditions of lunacy, viz., (a) the total registered numbers of the insane

in the country, and (b) the total numbers in the various lunatic asylums.

I shall endeavour to-night to lay before you a few figures illustrating both these conditions of lunacy, and you will judge whether they bear out the conclusion at which I have arrived, viz., THAT THE ALLEGED INCREASE OF LUNACY IS A POPULAR FALLACY, UNSUPPORTED BY RECENT STATISTICS.

I.—Total Numbers of the Insane.

A statement of the grand total of the insane of all classes detained in the various asylums of England and Wales, in the workhouses and in private dwellings, will show on what grounds the general belief in the increase in our generation of lunacy is founded. These numbers for the years 1844, 1852, 1858, and 1868 respectively, with the ratio to the population, are given in the following table:—

*Table I.—Showing the grand total of the Insane in England and Wales, with the ratio to the population, on the 1st January, 1844, 1852, 1858, and 1868.**

YEARS. (1st January.)	Grand Total of the Insane in England and Wales.	Ratio of Lunatics to the Population.
1844.	20,611.	1 in 802.
1852.	26,352.	1 in 691.
1858.	35,347.	1 in 544.
1868.	50,118.	1 in 432.

Here we have at once an increase in the last twenty-five years in the number of registered lunatics of more than a hundred per cent. In 1844 one in 800 of the population was a registered lunatic; in 1868 this proportion increased to one in 432.

The distribution of these total numbers of the insane in 1844, '52, '58, and '68 respectively, is shown in the following Table:—

* The figures in this and the following tables have been compiled from the Annual Reports of the Commissioners in Lunacy to the Lord Chancellor, and the Annual Reports of the Poor Law Board. The naval and military lunatics have, for several reasons, been excluded from the calculations; they do not average 300 in all. The lunacy of the civil population of England and Wales is here under discussion.

Table II.—Showing the total number of Lunatics in England and Wales, with their place of maintenance, and the proportion in each, in the years 1844, 1852, 1858, and 1868.

Where Maintained.	1844.		1852.		1858.		1868.	
	Total.	Proportion per cent.						
In Asylums	11,272	54·7	17,190	65·3	22,184	62·8	32,605	65·0
In Workhouses and Private Dwellings	9,339	45·3	9,162	34·7	13,163	37·3	17,513	35·0
TOTALS	20,611	100	26,352	100	35,347	100	50,118	100

The per centage of the insane in asylums has increased 11 per cent. since 1844, and that in workhouses and private dwellings has fallen 10 per cent.

The statistics of lunacy in France record a similar increase in our generation in the total number of the insane in that country.

In the French official report *Statistique de la France, Statistique des Asiles d'Aliénés de 1854 à 1860*, the material of comparison with the lunacy statistics of England is supplied.* In France the total number of the insane increased from one in 796 of the population in 1851, to one in 444 in 1861.

The next table (III) shows the relative ratio to the population in England and Wales and in France from the year 1852, of the total number of the insane in each country. The result in both countries is, that the recorded number of lunatics has doubled during the period.

Table III.—Showing the ratio of Lunatics to the population in England and Wales, and in France, in the several years annexed.

ENGLAND AND WALES.		FRANCE.	
YEARS.	Ratio of Lunatics to the Population.	YEARS.	Ratio of Lunatics to the Population.
1852.	1 in 691	1851.	1 in 796
1858.	1 in 544	1856.	1 in 598
1868.	1 in 432	1861.	1 in 444

Thus, in England, in 1852, one in 691 of the population was a registered lunatic, and in France one in 796. In 1868 the proportion in England had risen to one in 432, and in France in 1861 to one in 444.

In explanation of the apparent increase of lunacy in England between 1841 and 1868, it is to be observed:—

* Compare also two papers in the *Journal de la Société de Statistique de Paris* for 1866. *De la Folie en France.*

1. That previous to the report of the metropolitan commissioners in lunacy in 1844, no statistical record existed of the numbers of the insane in England and Wales. The returns made in that report are, moreover, characterised by the commissioners as "plainly insufficient for general deductions." Again, in their report for 1847, the newly appointed commissioners in lunacy also observe on the returns of that year of the total number of the insane at 23,000, that "they are notoriously imperfect, falling far short of the actual amount."

2. The *Lunacy Regulation Act* of 1853, by requiring a quarterly return by the medical officers of unions of the pauper lunatics not in asylums, added farther accuracy to the registration of the total number of the insane, and hence farther swelled their numbers.

3. The Act of 1861, rendering pauper lunatics chargeable upon the common fund of the union (instead of on their parish) led to a farther increase in the number of lunatics and idiots sent to the county asylums, the fear of burthening their parish rates no longer influencing the action of the guardians in this respect. This provision specially led to the increase of the number of idiots in the county asylums.

4. We must distinctly note the influence of the opening of the county asylums on lunacy statistics. Before the passing of the Lunacy Act, 1845, the insane poor were in most counties in England an outcast multitude, detained no man knew how, treated by the lay speculators in lunacy, to whom they were farmed out, in the most niggardly and wretched manner, and oftentimes more neglected still by their relatives at home.* The opening of the county asylums erected under that act, forms a new era in the history of lunacy, and it cannot be wondered that the greater care thus bestowed upon the insane should lead to a larger knowledge of their numbers as well as of their condition.

In France likewise, where the existing lunacy arrange-

* In illustration of this assertion I would refer to the numerous facts detailed in the *Report of the Metropolitan Commissioners in Lunacy to the Lord Chancellor*, 1844. Those who have not access to this report may consult the speech on the *Regulation of Lunatic Asylums*, delivered by Lord Ashley, in the House of Commons, June 6th, 1845, and which is reprinted in a volume recently published, "Speeches of the Earl of Shaftesbury, K.G., upon subjects having relation chiefly to the claims and interests of the labouring classes, with a Preface." London : Chapman and Hall, 1868. (For a notice of this volume, see *Journal of Mental Science*, January, 1869. Part IV., Psychological News, "Lord Shaftesbury's Speeches.")

ments are based on the law of 1838, which compels the several departments to provide asylum accommodation for the care and treatment of their insane poor, the same great increase in the proportion of the insane to the population marks, as we have seen, the earlier years of the operation of their new lunacy laws, and admits of similar explanation.

II.—Numbers of the Insane in Asylums.

While great inaccuracy attaches to the past registration of the total numbers of the insane alike in England and of France, the numbers of those detained under medical certificates in asylums afford a more definite test of the prevailing amount of lunacy.

In the earlier days of the operations of the lunacy laws and when the county asylums were in course of opening, a considerable variation in the numbers of the insane in asylums was the necessary result. I prefer, therefore, for the object of our present enquiry to confine myself to the statistics furnished from the records of our asylums during the decennium 1858-68.

The Insane in Asylums are divided into two distinct classes, viz., (a) the *private patients* who are maintained at the cost of their friends, and (b) the *pauper patients* who are maintained at the cost of the several unions to which they belong.

The first table to which I would refer (Table IV.), under this division of my subject, shows the total number of the insane living in the asylums of England and Wales on the 1st of January, 1858 and 1868, with their proportion to the population.

Table IV.—Showing the total number of Lunatics and Idiots in the Asylums of England and Wales on the 1st January, 1858 and 1868 respectively, with the ratio to the population.

ASYLUMS.	1ST JANUARY, 1858.			1ST JANUARY, 1868.		
	Total Number. ^a			Total Number.		
	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.
Public Asylums	6,931	8,232	15,163	11,760	13,920	25,680
Lunatic Hospitals	913	838	1,751	1,171	1,111	2,282
Metropolitan Licensed Houses. .	1,166	1,457	2,623	1,179	1,367	2,546
Provincial Licensed Houses. .	1,357	1,290	2,647	1,110	987	2,097
Total Lunatics. . .	10,367	11,817	22,184	15,220	17,385	32,605
Proportion to the Population . .		1 in 865		1 in 653		

The result furnished by this table is, that the number of the insane in asylums has increased during the decennium 1858-68 from one in 865 of the population to one in 653.

The French statistics furnish a similar increase in the total number of the insane in Asylums. The following table (V.), shows the ratio of lunatics in Asylums in England and Wales, and in France.

Table V.—Showing the ratio of Lunatics in Asylums to the population in England and Wales, and in France, in the several years annexed.

ENGLAND AND WALES.		FRANCE.	
YEARS.	Ratio of Lunatics in Asylums to the Population.	YEAR .	Ratio of Lunatics in Asylums to the Population.
1858	1 in 865	1856	1 in 1,418
1868	1 in 653	1861	1 in 1,214

From this table (V.) it appears that in England and Wales one in every 653 of the population is now a certified lunatic, and in France one in every 1,214. On the other hand, we saw (table III.) that of the total registered number of the insane, the proportion in England and France to the population varied only slightly, being one in 432 and one in 444. There are, therefore, nearly double the number of lunatics placed under asylum treatment in England and Wales than in France.

This increase in the asylum population during the decennium is not equally shared by both classes of the insane. Indeed the following tables (VI. and VII.) will show that the increase is solely of the pauper lunatics, and that the number of the private patients has remained almost stationary.

Table VI. furnishes us with the fact, that on the 1st of January, 1858, the number of private patients in asylums was 4,612, and that on the 1st of January, 1868, it was 5,244. Taking the ratio of these numbers to the population, we find in 1858, that one in every 4,164 was an inmate of a private asylum, and in 1868, one in every 4,065. The difference is small, and shows, as I shall shortly explain, an absolute decrease in the lunacy of the country, if any allowance at all be made for the yearly increase in asylums of chronic and incurable cases.

Table VI.—Showing the total number of Private Patients in the Asylums of England and Wales, on the 1st of January, 1858 and 1868, respectively, with the ratio to the population.

ASYLUMS.	1ST JANUARY, 1858.			1ST JANUARY, 1868.		
	Number of Private Patients.			Number of Private Patients.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Public Asylums (County and Borough)	134	98	232	114	105	219
Lunatic Hospitals	818	759	1,577	961	909	1,870
Metropolitan Licensed Houses . . .	676	630	1,306	873	684	1,557
Provincial Licensed Houses . . .	754	743	1,497	901	697	1,598
Total number of Private Patients . .	2,382	2,230	4,612	2,849	2,395	5,244
Proportion to Population	1 in 4,164.			1 in 4,065.		

In table VII., on the other hand, is shown the number of pauper lunatics in Asylums in the years 1857 and 1867 respectively, with the ratio to the population.* In 1857 the total number was 17,572, and in 1867, 27,361; or in 1857, 1 in 1,093 of the population, against one in 779, in 1867, was a pauper lunatic. The yearly rate of increase in the number of inmates of the pauper asylums has thus been about 1,000.

* See note at the end of this paper—“*Note on the relations of Pauper Lunacy to the Population.*”

Table VII.—Shewing the total number of Pauper Patients in the Asylums of England and Wales on the 1st January, 1858 and 1868 respectively, with the ratio to the population.

ASYLUMS.	1ST JANUARY, 1858.			1ST JANUARY, 1868.		
	Number of Pauper Patients.			Number of Pauper Patients.		
	Male	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Public Asylums (County and Borough)	6,797	8,134	14,931	11,646	13,815	25,461
Lunatic Hospitals	95	79	174	210	202	412
Metropolitan Licensed Houses	490	827	1,317	306	683	989
Provincial Licensed Houses	603	547	1,150	209	290	499
Total number of Pauper Lunatics	7,985	9,587	17,572	12,371	14,990	27,361
Proportion to Population	1 in 1,093.			1 in 779.		

The question of the alleged increase of lunacy may be farther tested by statistical inquiry into the yearly admissions into our asylums.

Table VIII. gives the yearly admissions in the English asylums for the decennium 1858—68.

Table VIII.—Showing the number of Admissions into the Asylums of England and Wales in the Years 1857—67 respectively; with the ratio of Admissions to the Population.

ASYLUMS.	1857.			1867.		
	Number of Admissions.			Number of Admissions.		
	Male.	Female.	Both Sexes.	Male.	Female.	Both Sexes.
Public Asylums (County and Borough)	2,413	2,572	4,985	3,665	3,739	7,404
Lunatic Hospitals	431	473	904	380	436	816
Metropolitan Licensed Houses . . .	561	605	1,166	531	594	1,125
Provincial Licensed Houses	698	454	1,052	428	425	853
Total number of Admissions . .	4,003	4,104	8,107	5,004	5,194	10,198
Ratio of Admissions to the Population	1 in 2,369			1 in 2,090		

From this table (VIII.) it appears that the yearly number of admissions into the asylums of England and Wales has increased by 2,000 between 1857 and 1867, or whereas, one in every 2,369 of the population was in 1857 admitted into a lunatic asylum, in 1867 one in every 2,090 was there sent.

It results from the tables which I have now, in discussing the second division of my subject, THE NUMBERS OF THE INSANE IN ASYLUMS, laid before you this evening, that during the decennium 1858-68:—

a. The numbers of the insane in asylums has increased from 22,184 to 32,605, or from 1 in 865 of the population, to 1 in 653.

b. That this increase has been solely among the pauper lunatics; the numbers of the private patients remaining almost stationary. Thus the private patients in 1857 were 4,612 in number, and in 1867, 5,244, or in 1857 the ratio of 1 in every 4,164 of the population, to 1 in 4,065 in 1867. The pauper lunatics, on the other hand, rose from 17,572 in 1857, to 27,361 in 1867, or from 1 in 1,093 of the population, to 1 in 779.

c. That tested by the admissions into the asylums during the decennium, 1858—1868, a similar increase is observed. In 1857, the admissions were 8,107, and in 1867, 10,198, or in the relative ratio to the population of 1 in 2,369, and 1 in 2,090.

In considering the relation of these numbers to the alleged increase of lunacy, I would observe:—

1. That the increase in the asylum population being solely among the pauper lunatics, suggests similar causes to those which I have assigned in the first part of this paper, as explaining the increase in the total number of the insane registered since 1844. I need not repeat them now, as time rather presses.

2. In further testing the yearly rate of increase in the English asylum population, it is seen that *the rate of increase is in a yearly decreasing ratio*. Thus this annual rate of increase, taken in quinquennial periods, shows the following result:—

Table IX.—Showing the ratio of Increase per cent. in the Asylum population of England and Wales in quinquennial periods.

YEARS.	Ratio of increase per cent. in the asylum population.
1844—49	5·64 per cent.
1849—54	6·09 ,,
1854—59	3·41 ,,
1859—64	4·83 ,,
1864—68	3·82 ,,

Looking again to the experience of France, we find that the population in the French asylums has, during the twenty-five years 1835-61, increased by 19,700, or at an annual average of 750. Taking this increase also in quinquennial periods, a similar proportionate reduction in the ratio occurs. This is shown in table X.

Table X.—Showing the ratio of Increase per cent. in the Asylum population of France in quinquennial periods.

YEARS.	Ratio of increase per cent.
1836-41.	5.04.
1841-46.	5.94.
1846-51.	3.87.
1856-61.	3.14.

3. If mental disease be on the increase, it is at least satisfactory thus to find, that the annual increase, both in England and in France, is in a decreasing ratio. But the increase of the insane in asylums admits of a more simple explanation than the theory of the alleged increase of lunacy. Of every 100 patients admitted in a given period into an asylum, it is

evident that a certain number must remain over to swell the numbers, viz., the difference over the discharges and the deaths. In the decennium 1858-68, not every one of the 90,000 lunatics admitted into the English asylums was removed (recovered or relieved) or died. A certain number remain. In examining the official returns of these years, this remainder is found to be, in round numbers, 10,000, or as near as possible the increase in the numbers of the English asylum population during the same period. The actual numbers are thus:—

1858-68.

Total admissions ...	...	...	91,731
Total discharges ...	...	...	52,649
Total deaths ...	...	...	28,276
<i>Total remaining</i> ...	...	...	10,806

Or of every 100 patients admitted during the decennium 57.4 were discharged, 30.8 died, and 11.8 remain in the asylums.

The increase in the population of the English asylums during the decennium 1858-68 was 10,421 (table IV.) ; the difference between the discharges and deaths is 10,806 and represents, therefore, the whole of the increase. I might almost herewith conclude my remarks, and say, that I had now demonstrated, that no increase of insanity, as tested by the numbers in the English asylums, has occurred in this decennium.

4. I would, however, remind you, that table VII. shewed an actual increase in the number of admissions into asylums in 1867 of 1,091 as contrasted with the admissions of 1857. This increase is solely in the numbers of pauper patients, and is dependent on the causes to which I have already, in the first part of this paper, referred as influencing the more accurate registration of the insane poor in recent years. Every medical superintendent knows how increasing the practice is of filling up the wards of the county asylums with imbeciles and idiots from the union houses.

But in this direction also the increase is found to be on the decline. This is shewn in table XI.

Table XI.—Showing the ratio per cent. in the Increase of the admissions into the Asylums of England and Wales in the decennium, 1858—68.

YEARS.	Ratio of increase per cent. in the admissions into asylums.
1858—9 . . .	11·7 per cent. increase.
1859—60 . . .	1·5 ,,, increase.
1860—61 . . .	3·7 ,,, decrease.
1861—62 . . .	1·6 ,,, decrease.
1862—63 . . .	2·4 ,,, increase.
Average annual increase in the five years, 1858—63. . . }	1·2 ,,, increase.
1863—64 . . .	9·4 ,,, increase.
1864—65 . . .	10·4 ,,, increase.
1865—66 . . .	3·6 ,,, decrease.
1866—67 . . .	5·2 ,,, increase.
Average annual increase in the four years, 1863—67. . . }	5·3 ,,, increase.
Average annual increase in the nine years, 1858—67. . . }	3·0 ,,, increase.

The large annual increase of admissions in 1863-4 and 1864-5 are doubtless connected with the operation of the provision of the Irremovable Poor Act of 1861, which placed the cost of the maintenance of pauper lunatics on the common fund of the union, and removed the inducement in individual parishes to retain their insane poor at home, with a view of saving the local rates.

In France a similar result has been observed. The percentage of increase in the admissions has, in late years, gradually fallen. The ratio of increase in the admissions on the five quinquennial periods from 1835 to 1860 is thus stated:—

	PER CENT.
From 1st to 2nd period the ratio of the admissions increased	7.94
From 2nd to 3rd period	3.38
From 3rd to 4th period	3.83
From 4th to 5th period	2. 0

On these figures the author of the official French Lunacy Statistics whom I have more than once quoted to-night, yet failed justly to praise, thus observes :—

“Ainsi, la proportion d'accroissement, après s'être élevée à 7.94 p. 100 vers 1838, date de la loi relative au traitement des aliénés indigents, est successivement descendue à 3.83 et à 2 p. 100. On trouve dans cette diminution graduelle la preuve bien manifeste que l'accroissement si considérable des admissions est un fait tout à fait temporaire, et qui tient, en grande partie, à l'action bien faisante de la loi précitée. Pour satisfaire aux prescriptions de cette loi, qui a obligé chaque département à faire traiter ses aliénés indigents, les asiles ont été agrandis, multipliés, améliorés et le nombre des admis s'y est naturellement accru.”

NOTE ON THE RELATIONS OF PAUPER LUNACY TO THE POPULATION.

I give here, as of interest in relation to this question of the alleged increase of lunacy, a few figures compiled chiefly from the Poor Law Board returns, illustrating the relations of pauper lunacy to the pauperism of the country and to the population generally.

Distribution of Pauper Lunatics.—The following table shews the place of maintenance of the insane poor in the years 1857 and 1867 respectively, and the ratio per cent. of their distribution.

Table XII.—Showing the Number of Pauper Lunatics and Idiots in England and Wales in the years 1857 and '67, with their Place of Maintenance, and the ratio per cent. of their distribution.

WHERE MAINTAINED.	1857.			1867.				
	(1st January.)			(1st January.)				
	Male.	Female.	Total.	Male.	Female.	Total.	Ratio per cent.	
In Public Asylums	6,104	7,384	13,488	48·7	11,336	13,412	24,748	58·0
(In County and Borough Asylums and Lunatic Hospitals.)								
In Licensed Houses	790	1,118	1,908	6·9	417	833	1,250	2·5
(Private Pauper Asylums.)								
In Workhouses	2,950	3,850	6,800	24·8	4,407	5,900	10,307	24·0
In Private Dwellings	2,394	3,103	5,497	19·6	2,782	3,906	6,638	15·5
(With friends or boarded out.)								
TOTALS	12,238	15,455	27,693	100	18,892	24,051	42,943	100

The percentage of increase is in the numbers in the public asylums. In referring, on a former occasion,* to this question of the distribution of the insane poor I made the following remarks, which I venture to reproduce here :—

“ During the twenty years (1847-67) the Lunacy Act, 1845, has been in force, the number of beds in the county asylums in England and Wales has increased from 5,500 to 26,000. In 1847 there was provided in the public asylums accommodation and means of treatment for 36 per cent. of the pauper lunacy of the country ; in 1867 we have advanced on this state of things, and provided for 60 per cent. of the whole pauper lunatics and idiots chargeable. During this period the total number of pauper lunatics and idiots has increased from 17,952 to 42,943, while in 1847 1 in every 880 of the whole population was a pauper lunatic. This proportion is now, in 1867, 1 in every 494. I do not attribute these numbers to any actual increase of insanity, but rather to the fact of the more accurate returns which are now made of the pauper lunacy of the country, and also in some degree to a number of persons in the lower middle class successfully contriving to evade the restrictions of the Poor Law, in order to procure for their insane relatives treatment in the county lunatic asylums. This opinion of the absence of any positive increase in the lunacy of the country is further supported by the relative proportion of private patients to the population during the same period. In 1847, 1 in 3,913 was certified as a private lunatic ; in 1867, 1 in 3,577. Thus, I think I am justified in saying that we see the limits of our labours in providing for the care and treatment of the insane poor ; and, further, that we have nearly gained the desired end. It is allowing a wide margin in our calculations for the future, if we place the possible total number of pauper lunatics and idiots at 1 in 400 of the population. This would give on a population of 22,000,000 about 55,000 pauper lunatics and idiots. Here the question at once arises, for how many of these 55,000 pauper lunatics and idiots will public asylum accommodation be requisite ? The table I have given above shows the existing proportions in England, in which the Insane Poor are divided between the public asylums, the workhouses, and the private dwellings. In calculating the wants of the future it is at once necessary to determine whether this proportion in the distribution of the insane poor—the result of the last twenty years’ experience—is a fair and proper one ? My own opinion is that the English proportion is, on the whole, a fair standard, and that we may safely assume for our future guidance that the pauper lunatics and idiots (whom I place at the ultimate average of one in 400 of the popu-

* “The Care and Treatment of the Insane Poor ;” The President’s Address, read at the Annual Meeting of the Medico-Psychological Association, held at the Royal College of Physicians, July 31, 1867.—*Journal of Mental Science*, Oct., 1867.

lation) may with due consideration of all their claims and requirements be thus distributed :—

- In Public Asylums, 60 per cent.
- In Workhouses, 25 per cent.
- In Private Dwellings, 15 per cent.

And if, as we hope and believe, the population continue to increase, and if mental disease, as we fear it will for many generations, increase in proportion with the population, it must be remembered that wealth increases in a tenfold degree, and that it cannot be otherwise than the duty of a Christian government to charge on this marvellous wealth the cost of the care and treatment for those who have fallen by the wayside, poverty-stricken and mentally wounded in the strife. During the last ten years, for example, the rental in the county of Yorkshire, exclusive of the represented boroughs, has increased by one million and a half. Is it an unreasonable burthen on this increase to add another penny to the county rate to build—as the justices are about to do—two new asylums for the insane poor of that great county? We should thus require, with a population of 22,000,000, 33,000 beds in the public asylums. Of these 26,000 are already provided. The problem then is not so difficult to solve as certain recent writers would lead the public to imagine. The machinery which has so successfully, and to the satisfaction of all classes of the community, provided in twenty years the 26,000 beds may I think fairly be trusted to add 7,000 more to the number."

Proportion of Pauper Lunatics to Population in England and Wales and in Scotland.—In the next table (XIII.) I have compared the proportion per cent. of paupers to the population, and of pauper lunatics to the population, and of pauper lunatics to paupers in England and Wales in 1857 and 1867 respectively.

Table XIII.—Showing the Total Number of Paupers and of Insane Paupers in England and Wales, with their Ratio to the Population in 1857 and 1867 respectively.

	Years (Lady Day.)	
	1857	1867
The average numbers of Paupers of all classes, including children, at one time in the receipt of relief in England and Wales	885,010	931,546
Number of Insane Paupers	30,735	41,276
Ratio per cent. of Paupers to Population	4.6	4.4
Ratio per cent. of Pauper Lunatics to Population	0.16	0.19
Ratio per cent. of Pauper Lunatics to Paupers	3.4	4.4

The ratio of pauper lunatics to the population is almost stationary. In 1857 it was 0.16 per cent., and in 1867, 0.19 per cent. There is no apparent increase of lunacy in these figures.

A comparison with the similar results observed in Scotland is made in table XIV.

Table XIV.—Showing the proportion per cent. of Paupers to population, of Pauper Lunatics to population, and of Pauper Lunatics to Paupers in England and Wales, and in Scotland, in the several years annexed.

	Proportion per Cent.		
	Of Paupers to Population.	Of Pauper Lunatics to Population.	Of Pauper Lunatics to Paupers.
England and Wales	1857	4·6	0·16
	1867	4·4	0·19
Scotland	1859	2·7	0·17
	1866	2·4	0·18

It would thus appear that while the ratio of pauperism to the population in England is double that of Scotland the ratio of the insane paupers to the population is nearly alike in both countries, and that, moreover, it has only increased in England 0.03 per cent., and in Scotland 0.01 per cent. in the decennium 1858-68.

The cost of Pauper Lunacy in England and Wales.—I add one more table (X.V.) illustrating the pecuniary relations of pauper lunacy to the population.

Table XV.—Showing the Cost of the Relief to the Poor and of the Maintenance of Pauper Lunatics in Asylums, with their relative Ratio, and the rate per head and in the pound of amount expended in Relief to the Poor, in the years 1857 and 1867 respectively.

Years. (Lady Day.)	Total Relief to the Poor.	Maintenance of Pauper Lunatics in Asylums.	Rate per head of amount expended in Relief to the Poor on the Estimated Population.	Rate in the Pound of the amount expended for Relief to the Poor on the Annual Value of Rateable Property.	
				s.	d.
1857	£5,878,542	£397,825		6	0½
1867	£6,959,839	£607,291		6	6½

From this table it appears that while the rate per head to the population expended in the relief of the poor was 6s. $0\frac{1}{2}$ in 1857, it rose to 6s. $6\frac{1}{4}$ d. in 1867, but that owing to the greater increase in the value of rateable property—an increase due to the labour of the poor—the rate in the pound (on the annual value of rateable property) expended for the actual relief of the poor fell from 1s. 8d. in 1857 to 1s. $4\frac{1}{2}$ d. in 1867. The proportion of the maintenance of pauper lunatics in asylums, owing to the greater numbers sent there, rose from 6.8 per cent. in 1857, to 8.7 per cent. in 1867.

Insanity without Delusions. By G. FIELDING BLANDFORD,
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I PURPOSE to consider in a few pages sundry so-called classes or varieties of insanity, which have given rise to no little dispute. Opinions with regard to these are still at variance, and so it comes to pass, that when we have to approach them, not from a therapeutical, but from a forensic stand-point, we are, by the ingenuity of counsel, launched amidst a multitude of seeming discrepancies, and it is suggested that nothing definite or certain is known about the whole subject. By a closer examination of the cases we see in practice, we shall find, I think, that the greater part of these doubts and difficulties will disappear.

The readers of this journal need not be told that the varieties of insanity, which give rise to the hottest forensic contests, are chiefly cases of the kind known as "moral insanity" and "impulsive insanity." Next to these are the cases of weakness of mind or imbecility, whether congenital, or the results of disease or old age. In almost every *cause célèbre* of later times, the attempt has been made to range the alleged lunatic in one or other of these classes, and the difficulty in reconciling the symptoms with those hitherto known and recognised as indicating insanity has consisted in this, that no delusions were discoverable.

Men who are daily brought into contact with the insane, know that delusions are but one symptom, or one stage, of the disorder we term insanity, or unsoundness of mind; but laymen and lawyers, and even medical men not specially engaged in the study of this disorder, still believe that delusions must be found before any patient can be pronounced insane. This notion appears to have been handed down by tradition;

men trusted unhesitatingly to the *dicta* of great authorities who had gone before them, and never dreamed of testing, far less of upsetting them, by means of their own observation or experience.

As Dr. Richardson says, speaking of blood-letting,* “So long as the dogmatic experience of the one master was alone sufficient to determine the practice of the thousands of disciples, so long there was unquestioned empiricism of practice against which it were illegal to stir; thus, line upon line, and precept upon precept, dogma became so firmly built, that the man who could remember the largest number of recipes of eminent men, *masters*, became the most eminent, and was, in turn, master himself.”

The student of mental science will recognise this veneration of authority in a book, with which every such student must needs be familiar—the “Anatomy of Melancholy.” In his chamber in Christchurch, Burton compiled his book out of the great works from the wisdom of Solomon to his own time, brought to him from Bodley’s library by his friend, John Rouse.

But not to go back so far as Burton’s day, we may look at a work of more modern date, written by Thomas Arnold, a physician of Leicester, in the year 1782. This is, in all respects, a remarkable book, and one greatly in advance of the literature of the subject previously put forth. Yet in it we may perceive how great importance was attached to words and definitions, and to the *dicta* of illustrious teachers of former times, and how men sought to bring their observed facts into agreement with the definitions and classifications already laid down, rather than to found upon them any new laws of health or disease.

The notion that delusions are always present in insanity has been traditionally handed down from the old writers, and is especially perpetuated by the lawyers, who are prone to venerate precedent, and value the judgments of the great legal luminaries of the past more highly than the medical opinions of our own age. The first of these assertions may be illustrated by Arnold’s book above mentioned. His first volume is entirely devoted to discussing the definitions and classification of insanity, and he gives the definitions of almost all those who preceded him. “Insanity,” he says, “or madness, or lunacy, has usually been considered by medical

* *The Practitioner*, Vol. I., p. 275.

writers, with some few exceptions, from the earliest ages down to the present time, as consisting of two kinds, to one of which they have almost unanimously given the name of melancholy, and to the other, that of mania, phrensy, or fury." . . . These two kinds of insanity have generally been defined in words to this effect:—" *Melancholy* is a permanent delirium, without fury or fever, in which the mind is dejected and timorous, and usually employed about one object." " *Mania* is a permanent delirium, with fury and audacity, but without fever."

" In the various definitions of insanity, which are to be found in medical writings, some of which I shall presently transcribe, the term *delirium* or something synonymous is commonly used. It is, however, differently defined by different writers. By many it is not defined at all; and by some it is used in defining madness, in a sense not very consistent either with the usual definition, or with that which themselves have given of this variable and unsettled term.

" But notwithstanding this uncertainty in the use of the word *delirium*, it were easy to transcribe a long list of definitions of melancholy and mania from the most noted practical writers, both of ancient and modern times, in which it would be seen that they universally borrow from the same source; and that almost every successor of Galen treads with little variation in the footsteps of his master, who himself did not materially deviate from the track which had already been marked out for him by his predecessors."*

Now it is to be remembered that the word *delirium* in the authors Arnold alludes to, had not the meaning which we now-a-days attach to it. We should not say that a monomaniac labouring under the delusion that he was the rightful inheritor of the throne, was suffering from delirium, but this would have been described as his malady by the writers of the eighteenth century. Here is the definition of Boerhaave, as given by Arnold.†

" Delirium is the existence of ideas in correspondence with some internal disposition of the brain, and not with external causes; together with the judgment arising from such ideas, and the consequent affections of the mind and actions of the body; and as these exist, in various degrees, and are solitary or combined, they give rise to various kinds of delirium."

* Vol. I., p. 29.

† Vol I., p. 42.

So we find melancholia defined by Sennertus as “*delirium seu imaginationis et rationis depravatio, sine febre, cum timore et moestitia*,” while mania is thus described: “*est mania, seu furor, delirium sine timore, sed potius cum audacia, sine febre.*”*

This *delirium sine febre* was our delusion; that which we now call delirium was, in old times, *delirium cum febre*. “*Phrenitis*,” says Hoffman, “*est insania cum febre, a stasi sanguinis inflammatoria in vasis cerebri orta.*”

Acknowledging that delirium, or as we should say delusion, is ever present in insanity, Arnold makes two great divisions—Ideal and Notional Insanity. “Ideal Insanity,” he says, † “is that state of mind in which a person imagines he sees, hears, or otherwise perceives, or converses with, persons or things, which either have no external existence to his senses at that time, or have no such external existence as they are then conceived to have; or, if he perceives external objects as they really exist, has yet erroneous and absurd ideas of his own form, and other sensible qualities:—such a state of mind continuing for a considerable time, and being unaccompanied with any violent or adequate degree of fever.”

This would seem to correspond very closely to what we should describe as insanity characterised by hallucinations or illusions, while his Notional Insanity would answer to our insanity with delusions.

“Notional Insanity is that state of mind in which a person sees, hears, or otherwise perceives external objects as they really exist, as objects of sense: yet conceives such notions of the powers, properties, designs, state, destination, importance, manner of existence, or the like, of things and persons, of himself and others, as appear obviously, and often grossly erroneous, or unreasonable, to the common sense of the sober and judicious part of mankind. It is of considerable duration, is never accompanied with any great degree of fever, and very often with no fever at all.”

Arnold no doubt represented in these words the opinions of most of the writers of his time, yet even he was charged, as he tells us in the preface to his second volume, “with having extended the boundaries of insanity too far, and having either not at all, or not sufficiently distinguished it from mere vice and folly, from the moral insanity of the stoics.” Probably

* Op. cit., Vol. I., pp. 45, 49.
† I., p. 72.

the portions of his first volume thus censured are those in which he treats of Impulsive and Pathetic Insanity; and some of these are worthy of reproduction, for although his definitions and those of his illustrious predecessors oblige him to maintain the constant presence of delirium or delusion, yet his own observation appears to have enabled him to forestall those who have, in comparatively modern times, taught as new doctrines the theories of Impulsive and Moral Insanity.

"I call that Impulsive Insanity in which the patient is impelled to do, or say, what is highly imprudent, improper, unreasonable, impertinent, ridiculous, or absurd, without sufficient, with very slight, or with no apparent cause."^{*}

In his account of the varieties of Pathetic Insanity, there are various passages which point to a recognition of what would be called by some modern writers emotional or moral insanity, e.g., Irascible Insanity. "When the prevailing symptom is anger, such insanity merits the appellation of *irascible*, whether this passion exhibits itself in violent and groundless rage, or in as groundless, though less violent anger, from peevishness and discontent, or in a contentious and irritable disposition, which is for ever engaging in quarrels, and flaming with resentment. It is a symptom of insanity much noted by medical writers, and is very apt to exist, especially in the last-mentioned form, when the disorder is either occasioned by, or accompanied with, immoderate drinking. It disposes the patient to every kind of mischief, and not unfrequently to mischief of the most violent and desperate nature, especially when it rises into rage, which is usually a symptom of approaching phrenitic, or incoherent insanity."[†]

Nevertheless, Arnold, like his contemporaries, asserted that insanity is accompanied with *delirium* or *delusion*. It was reserved for Pinel to teach, in 1802, that there is such a disorder as *manie sans délire*, mania without delusion. In his steps followed Esquirol; he gave to this partial insanity the term *monomania*, instead of its old name, *mélancholie*; and he described two varieties of it as existing without delusion, *monomanie instinctive*, and *monomanie affective*, or *raisonnante*. The latter answers to the "moral insanity" of Prichard, the former to the "impulsive or instinctive insanity" of modern authors. The existence of insanity without delusions is con-

* I., p. 207.

† I., p. 252.

firmed in the pages of Hoffbauer, Georget, Gall, Marc, Combe, Prichard, Ray, Reil, Rush, &c.

It is thus apparent that practical physicians who devote their lives to the study of insanity, recognise as beyond question the fact that insanity may exist without delusion. It is otherwise, however, with lawyers. Looking not to medical, but to legal authorities and judgments, they still cling to the old belief that delusion must be ascertained if a man is pronounced lunatic ; nay, some of them, that even one delusion is not *per se* enough to absolve a lunatic from responsibility. By lawyers, no man's opinion is more often quoted or more highly honoured than that of the late Sir John Nicholl. "In the judgments of Sir John Nicholl," says Ray,* "in the ecclesiastical Courts, which, in their jurisprudence of wills, have frequent occasion to inquire into the effect of mental diseases on the powers of the mind, are also to be found, not only some masterly analyses of heterogeneous and conflicting evidence, but an acquaintance with the phenomena of insanity in its various forms, that would be creditable to the practical physician, and an application of it to the case under consideration, that satisfies the most cautious with the correctness of the decision."

One of the most celebrated cases upon which Sir John Nicholl pronounced judgment was that of Dew v. Clark, a case constantly referred to at the present time in the Court of Probate. In his judgment upon this he said, "The true criterion, the true test of the absence or presence of insanity, I take to be the absence or presence of what, used in a certain sense of it, is comprisable in a single term, namely —*delusion*. In short, I look upon delusion, in this sense of it, and insanity to be almost, if not altogether, convertible terms. On the contrary, in the absence of any such delusion, with whatever extravagances a supposed lunatic may be justly chargeable, and how like soever to a real madman he may think or act on some one or all subjects; still, in the absence, I repeat, of anything in the nature of *delusion*, so understood as above, the supposed lunatic is, in my judgment, not properly or essentially insane."

When we remember the veneration with which the judgments of Sir J. Nicoll are regarded by the bench and bar, it is plain that a medical witness, propounding opinions opposed to the above, requires great weight of scientific authority to support them.

* *Jurisprudence and Insanity*, preface, p. vii.

Another opinion referred to by lawyers is that enunciated by Mr., afterwards Lord Erskine, when defending Hadfield, who was being tried for shooting at the King in Drury Lane Theatre, in the year 1800. Erskine, however, was advocate, not judge, and he was contending against the doctrines of Lord Hale, which had prevailed in such cases up to this date. We know that Lord Hale condemned women to death for witchcraft, and therefore it is not wonderful that his opinions with regard to insanity should be equally mediæval, but it is a proof of the tenacity with which lawyers cling to received legal dicta, that these opinions should have prevailed almost to our own times from the period at which Hale lived, for he was made a judge in 1653.

"There is a partial insanity," says Lord Hale,* "and a total insanity. The former is either in respect to things *quoad hoc vel illud insanire*. Some persons that have a competent use of reason in respect of some subjects, are yet under a particular *dementia* in respect of some particular discourses, subjects, or applications ; or else it is partial in respect of degrees ; and this is the condition of very many, especially melancholy persons, who for the most part discover their defect in excessive fears and griefs, and yet are not wholly destitute of the use of reason ; and this partial insanity seems not to excuse them in the committing of any offence for its matter capital ; for, doubtless, most persons that are felons of themselves and others are under a degree of partial insanity when they commit these offences. It is very difficult to define the invisible line that divides perfect and partial insanity ; but it must rest upon circumstances duly to be weighed and considered both by judge and jury, lest on the one side there be a kind of inhumanity towards the defects of human nature ; or, on the other side, too great an indulgence given to great crimes."

I quote this to show the ideas against which Mr. Erskine had to contend when he defended Hadfield, a partially insane man, with undoubted delusions. His client being a partially insane patient, he laboured to show that delusions were essential to insanity, in order to prove that his client was truly insane, and entitled to acquittal on that account. He was careful not to go one step beyond what was wanted to exculpate the prisoner, and therefore his speech, which has been so often quoted, must always be looked upon as essentially that

* *Pleas of the Crown*, 30.

of an advocate. This will be understood if I quote a passage : — “Delusion, therefore, when there is no frenzy or raving madness, is the true character of insanity, and when it cannot be predicated of a man standing for life or death for a crime, he ought not, in my opinion, to be acquitted ; and if courts of law were to be governed by any other principle, every departure from sober, rational conduct would be an emancipation from criminal justice. I shall place my claim to your verdict upon no such dangerous foundation. I must convince you, not only that the unhappy prisoner was a lunatic within my own definition of lunacy, but that the act in question was the immediate, unqualified offspring of the disease. In civil cases, as I have already said, the law avoids every act of the lunatic during the period of the lunacy, although the delusion may be extremely circumscribed, although the mind may be quite sound in all that is not within the shades of the very partial eclipse, and although the act to be avoided can in no way be connected with the influence of the insanity ; but to deliver a lunatic from responsibility to criminal justice, above all in a case of such atrocity as the present, the relation between the disease and the act should be apparent. Where the connection is doubtful, the judgment should certainly be most indulgent, from the great difficulty of diving into the secret sources of a disordered mind ; but still, I think, as a doctrine of law, the delusion and the act should be connected.”

Such was the legal doctrine at the time Erskine spoke, not only that delusion must be ascertained, but that it must be connected with the act, and this notion still prevails to some extent at the present time. It is against such a weight of medical and legal authority that medical witnesses have to contend when they assert that insanity may exist without delusion. To what authorities can they appeal for support ? What has been said, and what can be said on this side of the question ?

Various divisions and classifications of insanity have been constructed by writers of our own country to prove that delusion is not a necessary concomitant. Dr. Prichard divided it into moral and intellectual insanity ; Dr. Bucknill says that insanity may be either intellectual, emotional, or volitional. Dr. Noble speaks of it as being either notional, or intelligential ; Dr. Daniel Tuke divides disorders of the mind into those which affect—1st, the intellect ; 2nd, the moral sentiments ; 3rd, the propensities ; and Dr. Maudsley says

that the different varieties of mental disease fall into two great divisions—*affective* and *ideational*. As subdivisions of the first of these, he speaks of *impulsive* and *moral insanity*.

Two different principles of classification seem to have existed in the minds of the writers who framed the above-mentioned divisions. Some, as Dr. Prichard and Dr. Daniel Tuke, appear to think a perversion of morality, of the moral sense, is equivalent to insanity. “Virtuous and vicious tendencies,” says Dr. Tuke, “would often appear to be hereditary; or, as congenital, are displayed from the earliest infancy in children subjected to the same educational influences. The moral faculties may be either excited or depressed by disease.” “Who has not seen,” asks Dr. Rush, “instances of patients in acute diseases discovering degrees of benevolence and integrity that were not natural to them in the ordinary course of their lives? Dreams affect the moral faculties as well as the intellect; under their influence we are benevolent, devout, passionate, and affectionate, as well as imaginative and talkative.”* And he quotes the case of a patient, formerly in the Richmond Asylum, Dublin, of whom it is said that “he exhibited a total want of moral feeling and principle, yet possessed considerable intelligence, ingenuity, and plausibility.”† Similarly, Dr. Prichard lays great weight on the perversion of a patient’s moral sense. Moral insanity he defines to be “madness, consisting in a morbid perversion of the natural feelings, affections, inclinations, temper, habits, moral dispositions, and natural impulses, without any remarkable disorder or defect of the intellect, or knowing and reasoning faculties, and particularly without any insane illusion of hallucination.”‡

In the general overthrow of the mind brought about by insanity we every day see that the moral sense, the sense of duty, propriety, and decency, is perverted or destroyed; patients are obscene in conduct, dirty in habits, altogether abominable. But the absence of this moral sense in any given case does not prove or constitute insanity any more than its presence proves sanity; for its absence may be due to early education and the example of associates, to hereditary transmission from a long line of criminal ancestors, and if we weigh it by a subjective standard of our own we shall hardly by this method determine the sanity or insanity of an individual.

* Bucknill and Tuke, p. 179.

† p. 180.

‡ Treatise on Insanity, p. 6.

The police records of our own and foreign capitals will testify that no crime is too gross, no vice too bestial to be committed by men and women perfectly sane, and perfectly able to take care of themselves. Probably greater wickedness is daily perpetrated by sane than ever was committed by insane persons, so that when immorality makes us question a man's state of mind, it must be remembered that insanity, if it exists, is to be demonstrated by other mental symptoms and concomitant facts and circumstances, and not by the act of wickedness alone.

Those writers who, like Dr. Bucknill, speak of intellectual, emotional, and volitional insanity, divide it according to the commonly received classification of the mind. Some such classification as this, in treating of the mind generally, has been adopted by many authors, as Dr. Daniel Tuke points out,* and a corresponding division of insanity has been suggested by it. Here we have on the one hand ideational, or intelligential insanity; on the other, affective or emotional, when no marked defect of intellect, above all no delusions, are discoverable.

The question here arises, what do we mean by the emotional part of the mind, and what by the intellectual? Is there also an emotional tract of the brain apart from an intellectual? Can the emotional part of the mind be so divorced in operation from the intellectual, that the one can become insane, the other remaining perfectly sane? I confess that I cannot bring myself to believe that there is an emotional part of the brain, for emotion, on the one hand, may be so general that it appears to affect every idea which exists in the mind; on the other, each idea would appear to have its special emotion. The emotion of a collector, when he discovers a rare engraving or a unique coin, is intense in degree, but it is perfectly special and peculiar to the idea, which years of education have implanted in the mind. The coin collector derives no pleasure from the engraving, and the possessor of the latter cares naught for coins. So the man of aesthetic education experiences emotions in accordance. The vile daub which gives pleasure to the boor causes him disgust, while the savage prefers his feathered idols to the marble of Phidias. I would here quote a passage from Dr. Maudsley's work on the mind†—"It is in reality the specific character of the

* Op. cit., p. 87.

† p. 136, 1st ed.

idea which determines the specific character of the emotion, and accordingly emotions are as many and various as ideas. And it has been before shown that the character of the idea is determined by the nature of the impression from without, and by the nature, as it has been modified by a life experience, of the reacting nervous centre ; this now containing an organization of ideas as its acquired nature, or as the expression of its due development. How difficult it is to explain matters from a psychological point of view is easy to perceive. While we are in such case considering the relation of emotion to idea, they are both concomitant effects of a deeper lying cause. As there are subjective sensations, so also there are subjective emotional states. It depends upon the nature of the fundamental elements—the internal reacting centre, and the external impression, whether in a given case we shall have a definite idea with little or no emotional quality, or whether we shall have the emotional quality so marked that the idea is almost lost in it.

"The hemispherical cells are confessedly not sensitive to pain ; still they have a sensibility of their own to ideas, and the sensibility which thus declares the manner of their affection is what we call emotional. And as there may be a hyperesthesia or an anaesthesia of sense, so also there may be a hyperesthesia or an anaesthesia of ideas. Certainly there do not appear to be satisfactory grounds either in psychology or physiology for supposing the nervous centres of emotion to be distinct from those of idea."

When we see that the same sight or piece of news may affect men differently, calling up emotion in varying degree, or that an individual may be very differently affected on two different days by the same thing ; when we see him become so melancholy, or so hilarious, that the whole of his ideas are tinged by the prevailing emotion ; that one person is thrown by an idea into such a state of terror, or delight, or anger, that every other idea is absorbed by it, while another under all exciting circumstances retains perfect command over every idea in his mind, one cannot help the conviction that the emotion felt at any time depends greatly on the physical condition of the individual, on the amount of what I would call the "force" possessed by his nerve centres. I believe that when the impression from without is conveyed to the centres of idea, the emotion caused thereby is in proportion to the strength of the stimulation in a state of perfect health, but when the force of the centres is abnormal, then the emotion may

be abnormal also—may be altogether that of depression or the reverse, altogether out of proportion to the strength of the stimulation. There is, however, in either case a constant and close relation between emotion and idea.

Upon theoretical grounds, then, we should expect that mental alteration would be due to changes which may truly be called physical. Something in the mechanism which produces the nerve force of the system goes awry, and the patient evinces depression or excitement in a degree unusual, and this may continue for a long or a short time, without other defect being noticeable. As a matter, not of theory, but of practice, those who have had opportunities of watching the gradual approach of insanity will agree that such a stage generally precedes that of intellectual aberration. Probably depression is found more frequently than excitement; some say that it always precedes excitement: *mania melancholiæ proles** is a very old saying, which has been reasserted in modern times by Guislain and others.

Men suffering from low spirits may go into society, or go about their daily business, without being called insane; others do the like under the influence of unusual excitement, buoyancy, and exuberance of spirits. But those who know such men thoroughly, and watch them and their words and works all the day long, can tell us that their ideas very soon participate in their feelings. The depressed man goes about his business, it is true, but he thinks that everything is going wrong, he is afraid of everything he undertakes, is all for economy, and fidgets and worries those about him past all endurance. The hilarious man buys a lot of things he does not want, alters his house, drinks more than he ought. His ideas of things are changed. He is not in a condition to be consulted in a matter requiring grave deliberation. Yet it cannot be said that there is intellectual aberration, if by this we mean delusion, or any coarse defect of intelligence. But intellectual alteration there is: the opinion of such men, especially about matters which concern themselves, is not worth so much as formerly. They confirm Dr. Conolly's assertion. "Insanity never exists without such an impairment of one or more of the faculties of the understanding as induces or is accompanied by some loss of the power of comparing."†

* δοκέει τὲ δὲ μοι μανίης τέ ξμεναι ἀρχὴ καὶ μέρος ἡ μελαγχολίη. Aretæus. Morb. Diuturn. I., 5.

† "Indications of Insanity," p. 306.

When a man's ideas are tinged by the prevailing emotion that pervades him, he is not to be reasoned with any more than a maniac. Although they have not formed themselves into those new combinations which we term delusions, they are not the less those of an "altered" man, of one who is "not right." And in accordance with these ideas, whether he is conscious of them or not, he commits acts which are equally those of an altered man.

But whether the physical condition causes ideas to be coloured by the prevailing emotion, or even brings about new ones in accordance with it, or whether in ordinary health specific ideas give rise to specific emotions, we see throughout that emotion and idea are closely connected, and are not to be divorced. And so it comes to pass that there cannot be an emotional part of the mind or brain, capable of becoming insane, while the ideational portion remains sound and unaltered. I believe that in every case of insanity defect of the ideational, that is of the intellectual, faculties exists.

To realise the practical bearing of what has been said, let us suppose ourselves to be in a court of law as witnesses to the unsoundness of mind of a person in whom no delusions are discoverable, yet who is said to be irresponsible, or incapable of taking care of himself or his affairs.

There are at least four varieties of such patients, all of which have in modern times been subjects of legal dispute, some of them having given rise to forensic contests of great celebrity.

I. The first that I shall speak of is that of persons who from senile decay, or disease of the brain, have become imbecile and fatuous, such fatuity being of various degrees, and manifested by loss of memory, neglect of personal cleanliness, filthy habits, loss of all self-respect and self-control.

Such patients are not insane in the ordinary sense of the word, and great stress is laid on this by opposing counsel; but interpreting insanity in its wide sense of "unsoundness of mind," we clearly bring them within its definition.

Here are two cases of individuals who up to the time of inquiries made by the Commissioners in Lunacy had been called sane by those who had charge of them; both were living away from their friends, and were not under certificates of lunacy.

The first was a gentleman, aged fifty-five years, who had had two attacks of hemiplegia; when I saw him, however, he could walk some miles in a day, though his gait

was slow and somewhat shuffling. He had no memory, could not recollect how long he had been in the house, whether months or years ; by night he had forgotten that he had seen his daughter in the morning ; he could not tell the name of the proprietor of the house, nor the name of his daughter, nor anyone's name, in fact, but his own. He kept repeating the same sentence over and over again, without being addressed. His habits and person were filthy in the extreme, as was also the wretched hole to which he nightly retired to sleep in perfect contentment. This man was so palpably imbecile and silly that a child could not have failed to perceive his condition, yet it was argued that, because he had no delusions, he was not legally of unsound mind. Here intellect was not disordered ; it was gone, and no one could have told from his existing condition through what stages, whether of insanity or other brain disease, it had declined to this state of utter dementia.

The other gentleman had been insane, and had frequently been an inmate of asylums. For the last ten years, however, he had been living with an attendant in lodgings. His memory, too, was gone, probably from the effects of drink. He did not recollect that he had executed a deed and assigned all his property to trustees. He spoke of drawing cheques and transacting business, whereas he had done nothing of the kind for years, and he spoke of a circumstance as having happened two years ago, which had taken place eight years before. He repeated over and over again the same sentence. He, also, was dirty in his habits.

In estimating the unsoundness of mind of patients whose chief defect is loss of memory, it is obvious that the degree of this must be taken into account. The memory of many persons is defective to some extent. Some cannot remember names, others confuse dates. What we have to consider is whether the failure of memory is so great as to render it impossible for an individual to take care of himself and his property. A man who does not recollect that he has executed a deed of trust, by which he has placed all his property in the hands of others, cannot be held capable of managing his affairs ; neither can he who is unable to remember the name or residence of his son-in-law and daughter, and when to this are added childishness and fatuity, as evinced in conversation and habits, the disorder of the intellect is but too plain.

II. Another class, on which an opinion will have to be

given not unfrequently, is that of the weak-minded, who from childhood have never been able to take care of themselves, but have been the perpetual torment of parents and guardians.

We are generally consulted about these at the time of their lives when they cease to be boys and girls, and are beginning to be responsible as men and women; frequently just before the age of twenty-one the question arises whether they are fit to be entrusted with the care of property. Such patients are most difficult to deal with legally. They are not insane in the ordinary sense of the word. They are not changed and altered from what they once were, for they have always been the same; always eccentric, obstinate, incapable of being taught, though capable, it may be, of learning a good deal of what suits their individual taste, most commonly depraved, fond of low company and every vice; generally liars, often thieves, vain and quarrelsome, spiteful, often horribly cruel.

The distracted parents seek our aid, but the patient, on his best behaviour when brought face to face with the physician, has frequently cunning wit enough to stand even a close cross-examination. Delusions he has none, his memory is often remarkably tenacious, and his misconduct he does not justify, but admits that it is wrong, and possibly promises amendment, for he is given to making promises which are immediately broken. In this category the petitioners sought to place the late Mr. W. F. Windham, and they failed, because his appearance and answers did not confirm that which had been alleged of him. It will often happen that we are unable to come to a conclusion in such cases from lack of opportunity of observation. Only those who live constantly with such youths can perceive how they differ from others, how incapable they are of rightly taking care of themselves or their affairs.

In giving evidence in inquiries as to these weak-minded youths it is of no use to lay stress upon the depravity of their conduct; neither must we look for this in all cases, for some are good and affectionate and easily controlled, but unable to control themselves or to transact business of any kind. Neither can we infer much from the mere amount of information they may have acquired. Idiots may be found at Earlswood who have extraordinary memories, and fill them with facts of all descriptions. Yet they are wholly unable to apply these, or to act with judgment for themselves. To use

the language of the old logicians, they can perform the first operation of the mind, *simplex apprehensio*, the receiving a notion of any object, but the others, *judicium* and *discursus*, the forming judgments, and proceeding from certain judgments to another founded upon them, are beyond their powers.

If such patients are closely watched, and their sayings and doings carefully analysed, there will be no difficulty in detecting intellectual defect as well as moral depravity, and it is upon the former that stress must be laid. Those that have come under my own observation bear this out, as do cases recorded by others. I watched for some time a youth who has since figured in the newspapers, and has been an inmate of a gaol. On one occasion an attempt was made to place him under legal restraint, but it failed, because the certifying medical men could testify to nothing but acts of depravity, which the Commissioners in Lunacy refused to receive as evidence of insanity. Probably on no one single day could sufficient facts indicative of insanity have been observed, as required by the statute when a certificate is to be signed. Nevertheless, by an affidavit his whole mental nature might have been declared.

When I first knew him he was between 15 and 16 years of age; he had been considered as deficient in intellect when a child, and had made no way with his education, though he had been to several schools and tutors, from all of which he had run away. I found him living with a man who kept him in sight always, and whom he thoroughly hated and feared. He was perfectly idle, would neither occupy nor amuse himself. Thence he was sent to a farmer's, where he had opportunities of indulging in drink and low company. He assaulted the maid-servant one evening, took out a horse from the stable, and rode off to a neighbouring town, where he lived for some days at a small public-house. He was brought back to his former quarters, whence he soon escaped, pawning all he could carry off, and going to Brighton. He then was placed with various attendants with whom he was on good terms generally, but periodically he had outbursts of passion, and fits, or exacerbations, of depravity, so to speak, and when restrained from going where he liked, he was violent and foul-mouthed beyond all belief. He would not go to the theatre, or opera, or any reputable place of amusement. Low music-halls were his especial delight, or any still more questionable haunt. At times his conduct was everything that

could be wished, and when, after a year and a half, he was sent to the house of a medical man, the statements which were made about him were not at first believed, so immaculate was his conduct, and so obliging his disposition for a month or two. Then he broke down; he couldn't help it, as he himself said, and an attempt was made to place him in an asylum, which unfortunately failed. Since that time I have only seen or heard of him at intervals; twice he enlisted in the army, but was injudiciously bought out again. Here, however, he kept clear of scrapes and had a good reputation in his company, though he was looked upon as "not right." Next he took to frequenting race-courses and such places, and cheated in the betting ring, threatened his father's life, and was locked up for three months, not being able to find bail to keep the peace. Since then I have not heard of him, but he will probably be not unfrequently an inmate of a prison, unless he is fortunate enough to get to an asylum. At times he would ask to be allowed to go to one, though at others he would defy anyone to confine him, quoting the case of Mr. Windham, whom he was proud to resemble.

Now of those who by constant intercourse with this youth had good opportunity of forming an opinion of his mental state, no one thought him of sound mind. And they came to this conclusion, not because of his depravity, but because of his intellectual defect. He was not the son of a peasant, but of a gentleman. He had had every advantage of education, but his mind was not able to avail itself of such opportunities, and at the age of eighteen it was on a level with that of a child of eight. As Dr. Maudsley says, "in giving an opinion on a case of suspected insanity, it is important to bear in mind that the individual is a *social* element, and to have regard therefore to his social relations. That which would scarcely be offensive or unnatural in a person belonging to the lowest strata of society—and certainly nowise inconsistent with his relations there—would be most offensive and unnatural in one holding a good position in society, and entirely inconsistent with his relations in it." The child-like and uneducated mind which we might find without surprise in a peasant's son of eighteen, we do not expect in the son of a member of parliament. His handwriting, spelling, and style of epistle equally corresponded; in fact, his spelling was worse than a boy's of eight. When sitting with his attendant, he would repeat the same words, or the same question over and over again, like a patient of the last-men-

tioned class. He had that peculiarity so common to these weak-minded people, restlessness and vacillation; he could do nothing which required any continued effort. He got tired of every place, and ran away, unless prevented; was at first good friends, and afterwards quarrelled with every person, and could not, in fact, even amuse himself, except by vice.

The ideational faculties of this youth were extremely deficient, and almost all power of reasoning was absent. His only end was to gratify his animal propensities, like an animal.

Another case was that of a youth who had some few hundred pounds, and as he was approaching the age of twenty-one, his friends sought to protect it by obtaining an order from the Lords Justices without an inquisition, the sum being under £1,000.* This young man had run the same course as the former, but had twice sailed to Australia and back, his friends thinking to make him a sailor instead of a farmer. He was fond of drinking and evil courses, and he ran away from every place he was in. He could tell me nothing about a ship, or his experiences in Australia; could not tell me the name of the street in London in which he was staying. He appeared to be most defective in powers of observation and in judgment. He proposed setting up a dog-cart so soon as he got his money, though this only amounted to four or five hundred pounds, and he seemed utterly ignorant of any mode of investing or taking care of it. On one occasion when he escaped from his attendant, he wandered about the streets of London all night, though he had money in his pocket, and the only thing he did was to indulge himself with a ride in a Hansom. I believe that a great deal of the so-called extravagance of youths of this description is due simply to a defective appreciation of the value of money, and some who are very close and keen about sixpences and shillings, cannot comprehend the meaning of securities or invested property, or of the interest derived thence, any more than can a child of four. The Lords Justices, upon affidavits, granted the order required, the patient not having offered any opposition to the petition.

I could enumerate a number of these cases, for in truth they are common enough. Where the individuals are manageable, they get along without legal interference; where they possess property, their friends but too often shrink from legal proceedings from fear lest it should be said that they

* Under the Act 25 & 26 Vict., c. 86, § xii.

are acting from interested motives, and so they are allowed to squander all they have. So many are under an impression that taking any steps for the control of a patient is equivalent to incarcerating him in an asylum, that friends are by this idea constantly deterred from acting beneficially for the protection of a weak relative. For further illustration of this variety of insanity without delusion, I refer my readers to Vol. X. of this Journal, in which Dr. Stanley Haynes has narrated, from the records of the Edinburgh asylum, fifteen cases of moral imbecility and insanity, which are valuable illustrations of what I have been urging. Dr. Haynes speaks of them as cases in which there is a congenital deficiency of one or more of the moral powers. I dissent from this interpretation, and from the theory that moral powers are congenital faculties, but I think it will be seen that in all there was deficient intellect, deficient judgment, deficient power of collating and comparing the various facts laid up by experience in the brain, a want of co-ordination of ideas, analogous to the want of co-ordination of muscles in cases where muscular power is still present.

Here, as in the last class of cases, the degree of weak-mindedness must be estimated, and in this lies the great difficulty. A youth may be weak, but the question will arise, is he weak enough to be held legally of unsound mind. And this can only be argued in view of the particular case.

III. We have now to consider cases of insanity proper, of that variety called "Moral Insanity." The patient has been sane, like other people, but he has become changed, an altered man, altered in likes and dislikes, in habits and occupations—is intemperate, depraved, dirty, extravagant, whereas he was just the reverse. But no delusions are to be discovered, and men, medical and others, hesitate to pronounce him insane. His acts may be such as no one but a madman would commit, acts not of depravity, but of absurdity, and in this case we are able to come to a conclusion without difficulty; but on the other hand they may be acts of depravity or eccentricity only, which, taken by themselves, would not prove insanity.

The first thing to be observed is that this change may occur at any age. It is often witnessed as the special form of the insanity of childhood. It constitutes the moral insanity of middle life. It appears in the old as the senile insanity of Prichard * and Burrows.†

* Op. cit., p. 25.

† "Commentaries," p. 409.

Children may be affected in this way at a very early age. In them we find, as we might expect, a large amount of action and violence in conjunction with the changed emotions and habits. A child's mental changes have their outcome in immediate bodily action, so that we should expect to find the acts indicating the insanity sooner than in the adult. Dr. Prichard mentions a case communicated by Dr. Hitch which illustrates this form of insanity coming on in a previously sane and intelligent little girl of seven.

When mental disorder makes its appearance in a boy or girl previously sane, its access is usually rapid, and the change so marked, that diagnosis is easy; and the alteration being for the most part excitement, rather than depression, with corresponding acts, measures for restraint and treatment are inevitable, and no one calls in question the propriety thereof; but when the patient is an adult, perhaps the head of a family, when the access of the malady is gradual and insidious, and the acts are those of extravagance, immorality, or ill will, rather than of violence, it may be very difficult to subject such an one to coercion, for he may appeal to a jury, and may be able to make a very good appearance before one.

The second point to be noted is that moral insanity, insanity without delusion as I prefer to call it, may correspond to each variety of emotional disturbance. Melancholia is more rare in children than in adults, yet it is to be met with. In the latter it is common, and it may, by its overwhelming influence, drive them to suicidal or homicidal acts; yet, apart from the act, we may not be able to discover delusion. I shall have to return to this in speaking of *impulsive* insanity. We may have the irascible and furious variety, and also the gay, exalted, and hilarious patients, who commit acts of extravagance and absurdity.

Melancholia without delusion, presents, perhaps, the most perfect form of what may be called Emotional Insanity, though we do not always find it discussed under this head.* Depression, lack of nerve force, weighs down the individual, and renders him unfit for mental work, as it destroys his capacity for hard bodily exercise. But positive delusion may be wanting. I lately saw a man who fell into low spirits, and one day wandered away from his home and office, and remained out of sight for a month. At the end of this time he returned, still in the same depressed state. I could find

* In Bucknill and Tuke's "Psychological Medicine" Melancholia and Emotional Insanity are discussed separately.

no delusion about this man : he was sorrow-stricken because he could not do his work at his office, and this made him run away from it. His mind was overwhelmed by the depressed state, and all his ideas were tinged by it, and though they were not confused into delusions, it was impossible to say that his intellect was sound. It was a marvel that he did not commit suicide, for this is the very type of the innumerable cases where suicide is committed by patients whose friends "only thought them a little low, and had no idea that they would do themselves any harm," but who are extremely anxious that the verdict should be *temporary insanity* and not *felo de se*.

Between the cases of depression and those marked by extravagance and hilarity, we find some whose altered character shows itself in extraordinary irascibility, unfounded suspicions, and ill-treatment of others. As examples of this variety, I may refer my readers to two of Dr. Hitch's cases, 1 and 5, reported by Dr. Prichard.* No. 1 was that of a man of forty, steady, regular, and domestic, who, by over anxiety and exertion in business, became altered, hasty and irascible, finding fault with everything at home, addicted to drink and strange women ; he forsook his family and business, and wandered about the country, so that he had to be confined in an asylum, where he perfectly recovered in three months. He had no fixed notion or delusion, but he talked incessantly. He was capable of making the nicest calculations connected with his own affairs, but would have expended his money in the most useless purchases. When left to himself his conduct and language were ridiculous in the extreme. The other case was that of a woman of thirty, who became changed, neglected her children, abused her husband, and evinced the greatest hatred of him. She resided with various people, quarrelled with all, broke all the windows and crockery of the workhouse, and everything in her husband's house, and was then sent to the asylum. "Her mind appeared totally unaffected as to its understanding portion, but in the moral part, completely perverted."

We also find patients, as I have said, gay and hilarious, extravagant and vain-glorious, who have no absolute delusion, but whose intellect is as truly disordered as that of any monomaniac—nay, who are often much more irrational and incoherent than the latter.

* Op. cit., p. 51.

A gentleman used to come under my care periodically for attacks of mania, who had originally received a concussion of the brain in a railway accident, and had subsequently an epileptic fit, and after a long interval a second. He was noisy, ostentatious, used to order carriages and pretend to be a very grand person, but he never had any downright delusion. There was a great want of consecutiveness in his conversation, and he was sometimes very hysterical and depressed : there was very little else to be said about him. His conduct and demeanour were quite different from his natural habit, and no one acquainted with him could have failed to perceive the alteration. He was very excited and passionate at times, and one of his fits was the result of a violent temper into which he put himself on one occasion. He was admitted six times under my care, but died at home, his health generally failing. Twice he recovered after an attack of gout. Although there were no delusions, his conversation on one occasion became perfectly incoherent ; in fact, he was in a state of complete subacute mania. It was most difficult to sign a certificate in this case, at any rate for one not previously acquainted with the patient, yet no one who was with him for twenty-four hours could doubt the disorder of his intellect.

With this patient on one occasion there was also under treatment another, whose case was, in some respects, similar. This I have already briefly mentioned in the summary of my lectures.* His malady also commenced with an epileptic fit, from which time he gradually became an altered man, though three years elapsed before he did anything that warranted legal restraint. He then rode on horseback to the end of the chain pier at Brighton, assaulted the police, was locked up, when bailed did not appear, and was then sent to an asylum.

When there he justified his acts in an absurd way, and talked and wrote great nonsense, but had no delusion at any time. He rambled in his conversation, and still more in his letters. These, which he wrote incessantly, sufficiently indicated the confusion of his ideas, and the disorder of his intellect ; yet certain persons thought him unjustly detained, and sent a lawyer to see him. This gentleman thought him insane, but only because he could not keep him to the point on any subject ; and because—though the matter was of so

* "Med. Times and Gazette," Sept. 1st, 1866.

great importance—he was frivolous and absurd in his conversation upon it. He had no ascertainable delusion. He recovered sufficiently to leave the asylum, and died within a year, it was said, of abscess of the liver. One of the alterations in his character was, that instead of being a most temperate man he had become greatly addicted to drink.

Such cases must occur in the practice of all alienists, and I therefore abstain from enumerating more. Besides these patients whose insanity is manifested by their conduct, and not by delusions, we shall find others, who, in the early stage, show no delusions, but in whom they are discoverable at a later period. Also there are patients who have recovered so far as to have lost their delusions, but have not returned to their normal mental condition. These half-cured and semi-insane people are often most difficult to deal with, legally or remedially, but to them the same rule is applicable. We must seek for intellectual defect in their irrational justification of absurd acts, and in incoherent writing, in which such patients often betray their malady. Nor must it be forgotten that patients evidently insane are not unfrequently said to have no delusion, because their delusion is kept hidden, and revealed to no one. Yet it may have lurked there for years, and by it their whole conduct may have been regulated. I saw a lady the other day, who was said to be morally insane. By accident, I heard that she talked to herself a great deal when alone, and then it came out that she was, and had been for years, tormented by "voices."

IV. I now come to the last class of cases of insanity without delusions, one which is, perhaps, the most difficult of all, pathologically and judicially, to examine. It is that described as *impulsive* or *instinctive* insanity. Such patients, when it falls to our lot to see them, have, for the most part, committed, or desired to commit, some crime, being impelled, it is said, *instinctively*, to the deed. The special mental condition under which it was done has often passed away, having, perhaps, lasted but a very short time, and we are left to conjecture its nature.

After perusing the reports of various cases of so-called impulsive insanity, one is led to the conclusion that many different varieties have been comprised under this head by various writers, the one connecting link being the committal of a crime. Some have been cases of melancholia, others of acute mania of brief duration, others of epileptic *furor*, or of transient delirium connected with vertigo or other cerebral

symptoms. In others there has been some hidden delusion, or transient mania connected with that condition of brain which we so often encounter in patients suddenly waking out of sleep, which passes off in a short time, varying from minutes to hours. In others there is a "fixed idea," which is, to all intents and purposes, the same as a delusion, a morbid idea fixed in the mind, which, like a delusion, may be controlled for an indefinite length of time, but being some day no longer controllable, may hurry the patient into violent action. "It happens that the patient succeeds in controlling the morbid idea for a time, calls up other ideas to counteract it, warns his probable victim to get out of the way, or begs earnestly to be himself put under some restraint; but at last, perhaps, from a further deterioration of nervous element, through bodily disturbance, the morbid idea acquires a fatal predominance; the tension of it becomes excessive; it is no longer an *idea* the relations of which the mind can contemplate, but a violent *impulse* into which the mind is absorbed, and which irresistibly utters itself in action."* This I believe to be the true explanation of that which best deserves the name of impulsive insanity, and if it be so, how can it be said that the intellect in these cases is sound, and that the ideational centres when disordered must evince delusion in every case?

The particulars of examples of so-called impulsive insanity require very close analysis. It is to be remembered that insane persons commit every day insane acts, which are set down without question or comment as engendered of their malady, and yet we frequently cannot connect them with any special delusion or idea. Thus, one breaks the windows, another tears up or strips off his clothes, another daubs his excrement about the walls, or even eats it. We do not call these acts impulsive, and yet we cannot assign any cause for them; the patient being manifestly insane, we do not make the attempt. Why, then, when the act is murder or arson, should we place it in a separate and special category, and call the patient a homicidal monomaniac? Two cases of impulsive acts I have lately encountered. A young officer, who had been "odd" for about a week, was staying with a medical man, under no special control or surveillance, but because it was thought right that he should not be altogether without advice. He was sitting by himself one day, when a sudden idea seized him that he would like to pull down the

* Maudsley's "Physiology and Pathology of the Mind," p. 310.

chimney-piece; this he accordingly demolished, and then rang the bell to announce the fact. His mental disorder seems to have passed off in the act, for when I saw him the following day, he appeared better than during the preceding week—in fact, entirely recovered. He could assign no motive whatever for what he had done, except that it came into his head to do it. He did not defend or in any way account for it. Here was a genuine case of impulsive action committed by a patient, in whom the following day no sign of insanity was observable, yet in the preceding week he was manifestly disordered in mind; there was, however, no apparent connection between his mental symptoms and his assault on the chimney-piece: it was an insane act. Another gentleman was the most suicidal patient I ever knew, yet he was not in the slightest degree melancholic, nor were any of his mental symptoms or delusions, which were manifest enough, connected in any discoverable way with self-destruction. He had, like Dr. Skae's patient, a simple abstract desire to kill, not another, but himself, and he lost no opportunity of making the attempt. Here, however, was a disordered intellect, and his suicidal propensities were a part of the general disorder, not to be accounted for, and not to be referred to any category of suicidal impulse. Another patient, a young woman in service, felt the impulsive idea, but controlled it so that it did not explode in action. She had been reading, she told me, some poetry about the Fenian executions, when suddenly an idea came over her that she must murder her fellow servant who was with her at the time in the pantry. She resisted it, however, and it appears to have passed away. A twelvemonth later she became low spirited, and now an impulse to commit, not murder, but suicide seized her, her notion being that she was too wicked to live on account of having previously thought of murdering her fellow servant. This also she had successfully resisted, and had made no attempt at self-destruction. Here was a case which, when I saw it, was one of genuine melancholia. She had been on the verge of committing a crime at both times, but had controlled the impulse. Such cases, where an idea arises but is controlled, are most valuable, and ought to be recorded whenever we meet with them, for here there is no possibility of the allegation that impulsive insanity is invented to excuse crime. We can study these cases in our practice, not in the arena of a court of law, and none serve better to illustrate the absurdity of the legal dictum as to the knowledge of right and wrong.

This was a case which, in the first instance, certainly deserved the name of impulsive insanity. It afterwards became melancholia, either as a reaction from the first state, or as a development of it, for murder may be committed by melancholic patients just as is suicide by those who are not melancholic. Seeing her at the time of the marked depression, it was not possible for me to say, with accuracy, what her mental condition was at the time of her first impulse.

I mention these cases to show how we may explain many acts of violence, or impulses thereto, without betaking ourselves to a special form of insanity. Nevertheless, after extracting all which ought to be classed as mania, melancholia, or the like, there remain some which truly deserve the name of impulsive insanity, and cannot be brought under any other category. To quote the words of Casper, whom no one will accuse of undue leniency towards alleged lunatics, "There are still other cases whose actual existence I am all the less inclined to deny, as I myself have had occasion to make similar observations. These pure cases, that is, those in which, without the individual having laboured under any form whatever of insanity, or having been from any bodily cause suddenly and transitorily affected by mental disturbance, those cases, therefore, in which there co-existed with otherwise mental integrity an 'inexplicable something,' an 'instinctive desire' to kill (Esquirol, Marc, Georget, &c.), are extremely rare, or rather there are extremely few of these cases published; for I am convinced that such pure cases actually occur far more frequently than their literary history would seem to show."*

Whether these impulses spring from a sudden idea, or a "fixed idea," there is in all, I maintain, an idea or thought of some kind. They depend on disorder of the ideational centres, though they are true examples of insanity without delusion.

In all these varieties of unsoundness of mind, there is, in my opinion, defect of intellect, defective or abnormal ideation, in addition to the moral depravity or violent action which may be the chief distinguishing feature; and to make this plain and undeniable should be the object of our examination, when we are going either to sign a certificate or to give evidence in a court of law.

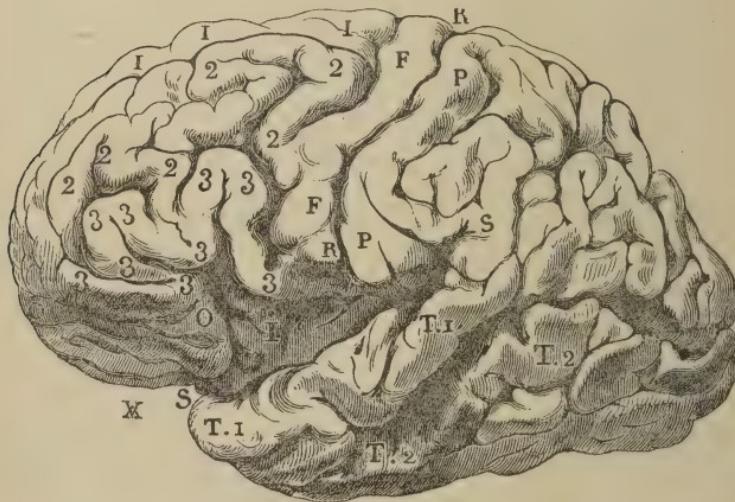
* Casper's Forensic Medicine, iv., 334, Sydn. Soc. Trans.

ENGRAVING OF THE CONVEX SURFACE OF THE LEFT HEMISPHERE,
SHEWING THE DISPOSITION AND ARRANGEMENT OF THE CEREBRAL
CONVOLUTIONS,

From a cast kindly sent to the author by Prof. Broca, of Paris.



For description, see the first part of this series of papers, "JOURNAL OF MENTAL SCIENCE," Jan., 1868, p. 522.



RR, Fissure of Rolando.

SS, Fissure of Sylvius.

1, 2, 3, First, second, and third frontal convolutions.

FF, Transverse frontal convolution.

PP, Transverse parietal convolution.

OO, Orbital convolutions.

T1, T2, First and second temporo-sphenoidal convolutions.

I, Island of Reil (the superior and inferior marginal convolutions are represented as being drawn asunder so as to expose it).

Notes of a Visit to American Asylums. By ALEXANDER ROBERTSON, M.D., Physician to the Town's Hospital and City Parochial Asylum, Glasgow.

Last summer, in the course of a tour in the United States and Canada, I visited a number of Asylums for the Insane, jotting down my observations and impressions at the earliest opportunity after leaving the respective establishments. They are now submitted in a condensed form in these notes; and I trust that they may convey to the readers somewhat of the interest experienced by myself during my visits. It is almost superfluous to say that the physician-superintendents received me most courteously, and their kind attention will ever be suggestive of pleasant recollections in connection with my trans-Atlantic trip. Without further preface, I shall proceed first to give a short account of the Michigan Asylum,* visited 13th June, 1868.

THE MICHIGAN ASYLUM.

It occupies a very central position in the state, about a mile from the pretty little town of Kalamazoo. The ground in the entire district is flat and prairie-like in character. The site of the asylum is, however, somewhat elevated, and commands a view of a considerable stretch of country, though uninteresting as a prospect. Attached to the institution there are 167 acres of land, on which there is a good deal of wood, especially oak, hickory, and chestnut. A paling of no great height surrounds the grounds. Leaving the town road, a somewhat tortuous walk of about two hundred yards in length leads up to the principal entrance into the asylum. The building is of brick, and consists of an extensive front, with the offices and superintendent's house in the centre,

* On approaching this institution I was struck by a loud, interrupted croaking noise, not unlike the *music* of the "Canadian band" I had heard in the country districts of Canada, and which is produced especially by the bull frogs in the marshy parts of the "bush." I soon, however, learned that it was the peculiar song of the seventeen year locusts, who had lately emerged from their living tombs, and were merrily living through the short span of their new existence. I afterwards came across them at different points of the American Continent eastward, as far as Baltimore. It is the male who makes the monotonous and somewhat disagreeable sound; the females busy themselves in preparing for the new generation, and are silent.

standing out in relief, and surmounted by a dome. The extremities of this frontage are crowned with towers, which act as ventilators, and on each side two wings recede from it to a considerable distance. Some parts are two, and others three storeys in height.

Though opened for a small number of patients in 1859, building operations have been in progress ever since, at short intervals, and a part of the male side is not yet finished. It is the only asylum for the State of Michigan. The majority of the patients are supported at the public expense, although a considerable number are private, paying rates of board from five dollars (about 15s. at current rate of exchange) a week upwards. It has been constructed for the most part under the special directions of the medical superintendent, Dr. Van Deuzen, the Governor of the State having appointed him "building commissioner" for that purpose; and both in plan and general arrangement, it reflects much credit on his knowledge of the requirements of such an institution.

The directory consists of six trustees, appointed by the Senate, on the nomination of the Governor of the State, who have the entire control of the asylum. Their appointment is an honorary one, lasts for six years, and is so arranged that not more than two retire at a time. Dr. Deuzen's services are much appreciated by the trustees, as is indicated by the fact of their having placed a fine oil painting of him in the board-room along with those of two of the leading directors. He very courteously showed me over the entire establishment.

Interior Plan, &c.—On each floor there is a wide central corridor, with day-room, dining-room, and bed-rooms right and left. On one side is a recess, occupying the space of about two bed-rooms, with a bow window looking towards the front of the asylum. The parlour connected with each corridor—or hall, as it is called—is of moderate size, but along with the alcove and gallery the day-room accommodation is quite sufficient. Each hall has its own dining-room. Dr. Deuzen disapproves of the *general* dining-room system, as having a tendency to break down classification. Each of the bed-rooms contains 1,700 cubic feet—a large amount; but it is considered to be not more than is necessary, seeing that the patients are not restricted from sitting in them during the day, and they not unfrequently take advantage of this liberty. There are also a small number of associated dormitories with from six to twelve beds; but the patients for the

most part have each a bed-room. The furnishing of the various apartments was, upon the whole, comfortable, and in excellent taste; but there was a bareness about the white-washed walls of some of the galleries, though it was stated that engravings, &c., were gradually being introduced as the funds would permit. The floors are oiled, and so are the dining-room tables, no table cloths being used. Horse hair mattresses are in universal use for the beds.

Ventilation, Heating, &c.—The upper sash of the windows is fixed; there are two below, the outer one—also fixed—of cast iron, and unglazed; the inner one of wood, and glazed, is moveable to any extent. Hot air in the cold season is admitted by openings near the floor; the apertures of the ventilating flues are close to the ceiling, through which the used air passes along the flues into chambers in the attics, and finally into the open air through the cupolas. The air is heated by passing over steam pipes in the basement, and is farther propelled by a centrifugal fan. The waste steam is afterwards used in the washing-house, and the waste water from the baths and sinks is economised for the water-closets. Dr. Deuzen drew my special attention to the *deafening* of the various apartments, which is effected by four-inch brick arches, “independent of the flooring joists above, and the ceiling joists below.” This arrangement he considers both cheap and effectual, rendering, as it does, each room nearly fire-proof.

Meals.—Breakfast at half-past six a.m.; dinner at twelve; supper at six p.m. All the patients have butcher meat, or fish, twice daily. They are not restricted to quantity, the attendant supplying as much as is wanted. With the exception of a very few, all have knives and forks of an ordinary pattern, i.e., the entire edge is cutting, and the prongs of the forks are separate throughout. Should the patient be suicidal, an attendant sits beside him at meals. There are three attendants in each dining-room, for fourteen or sixteen patients. Before any one rises from table, the attendant nearest the door, beginning at the patient next him, takes the fork and knife from each, proceeding upwards to the head of the table, and puts them into the cupboard at the upper end of the room. The food is brought into the dining-room along-side of the cupboard, by the “dumb waiter;” and a railway in the basement facilitates its conveyance from the kitchen.

Employment.—Very little out-door work is done by the

patients, and only two or three were engaged at the shops. It was urged that most of the inmates had been overwrought before admission, and that therefore they were not asked to work or even walk much. They do, however, take daily exercise in the grounds, when the weather permits, and parties of two, three, or four, are permitted to walk beyond them into the town, as well as the country, under the care of an attendant. There is no feeling in the neighbourhood against this extended exercise.

Amusements.—Dr. Deuzen said that his great principle of treatment was to study the patients' wishes. Thus, in amusements, if there is a large proportion of young people resident he may have two dance nights in the week; but should they be more advanced in life, reading in their own rooms would be preferred. No reading or writing classes are conducted; no regular lectures nor regular anything, though occasional lectures are given to the more intelligent. He had been assured elsewhere by those who had recovered that those *regular* lectures and parties to which they were required to go had been very irksome to them. There is a fine magic lantern with a large supply of slides belonging to the institution, which is a favourite means of amusement. There is a good library of six hundred volumes.

Religious Service.—There is no chapel; but a paid chaplain conducts worship in one of the halls on Sabbaths, and visits at other times also.

Restraint.—Three patients were wearing leather muffs at the time of my visit, which were fixed at the wrist to a belt encircling the waist. They were quiet in my presence, though they were stated to be occasionally violent and destructive. The camisole is also sometimes used. No patient was in seclusion. The employment of mechanical restraint in the forms referred to, Dr. Deuzen said, was much better than to have attendants struggling with refractory lunatics (which he believed would otherwise necessarily happen), for he had known insane persons who rather than yield would resist the attendants till death, whereas they immediately became calm when restrained by the muffs or camisole. There are no padded rooms in the asylum.

Medical Treatment.—The medicines principally used are preparations of cinchona, iron, arsenic, and nux vomica. Ague occurs in the district, but less so now than formerly, since the ground has been cleared to a large extent. In many cases, however, there is a latent disposition to this disease, giving a

character to nervous and other ailments, though not manifesting itself openly in its ordinary form. The medicines are given out in single doses by the "supervisor" (the convenient and appropriate title of the principal attendant in many American asylums) to the attendants in little earthenware dishes on which the patients' names are painted.

Classification.—Very few epileptics are admitted, and Dr. Deuzen generally declines receiving them. There are eight classes on each side. Besides the form of mental disease, they are arranged according to their education, manners, and tastes. It matters little what rate of board is paid. Two restaurant keepers were pointed out to me paying high rates, who, though recovering, would not be permitted to mix with the general body of quiet and convalescent inmates, simply because they had never been accustomed to, and were not fit to mix in, other than rude society. Marked quietude and order prevailed everywhere; even in the ward for the excited class only two patients were talking somewhat loudly. Another noticeable feature was the absence of requests for dismissal. However, a number of the men who were not employed in any way had a listless, apathetic look, and time seemed to hang heavily on their hands.

Attendants.—They are all engaged by the Medical-Superintendent, and are of a very superior order. Dr. Deuzen said that he had made the securing and retaining of good attendants a special study. More than ordinary deference was paid to them. Thus at my visit, I was formally introduced, on going into each of the galleries—"Dr. R., Miss — &c." The proportion in the halls for the acute cases is one attendant to three or four patients; and the maximum number under treatment in these halls is fourteen. When this number has been increased temporarily they were found to annoy and irritate each other. In the convalescent halls the number of patients is larger with a smaller proportion of attendants. One to six is the average proportion of attendants to patients throughout the asylum. There is no indoor night-attendant except in cases of sickness. A watchman walks round the asylum outside during the night at short intervals.

Form of Admission.—In the case of private patients it is very simple. Only one medical certificate is required; and the certifying medical man does not require to state the evidences of insanity. Notwithstanding this ease of committal, Dr. Deuzen had never known any one attempt to send a sane person into the asylum. In the case of paupers, or

"indigent" insane, as they are termed, two medical men must depose to the insanity of the person before the Judge of Probate of the county, who is required also to take evidence, and be satisfied of the poverty of the patient before he can grant an order for his admission. The Medical-Superintendent can decline to admit patients. He showed me a note from an ex-Governor of the State at present in high social position, desiring that an intimate friend who had become insane should be admitted, and at the same time told me that he had declined receiving him on the ground that his relatives were well able to send him to one of the eastern institutions. There being only one vacancy, he had considered it right to give the preference to a pauper patient who would otherwise have been consigned to the poor-house.

It will be inferred from the last remark that the asylum is quite full. Two hundred and thirty patients were resident; but the number of insane in the State is considerably higher. Many are in the poor-house, where their treatment is indifferent—to use a mild expression. To a certain extent the pressure on the accommodation has been met by the transference of some of the quiet and harmless patients to the care of their friends; but, in all, not above fifty or sixty had been disposed of in this way since the erection of the asylum. There had never been any attempt to introduce the Gheel system in the State, and Dr. Deuzen does not think it would suit the character of the American people.

Causes.—Dr. Deuzen, in his last annual report, directs special attention to one of the causes of mental disease in the females under his care—the revolting and unnatural habit of forced abortion, to which public attention has been lately attracted in this country by the discussion of its propriety at the meetings of a certain society. His remarks on this subject are well worthy of quotation* :—" Fearfully afflictive as is insanity under any circumstances, it is unmistakably and unspeakably more so, when, in the person of one bearing the cherished and sacred name of wife, it is in one sense self-induced, and by the commission of a crime against a far higher than human law, and in direct violation of the holiest instinct of her nature. There has been no uniformity in the character of mental disease thus developed. The derangement of mental function has generally occurred as a result of local injury, and the serious impairment of

* Annual Report for 1867.

general health directly traceable to the criminal act. In a few cases it has operated directly as a moral cause, as for instance when the unfortunate sufferer has borne a child, which has been permitted to remain with her only long enough to show the unhappy mother the priceless value of the gift she had previously refused to accept. In these cases the immediate cause of insanity was remorse. Unless this most disastrous practice be speedily arrested by the efforts now being used to suppress it, and by more stringent laws severely punishing all parties implicated, it will materially increase the number of female patients annually presented for treatment."

Recoveries.—The recoveries among *recent* cases admitted in the course of last year were 70 p. c. By *recent* cases is meant those in which insanity has not existed longer than a year. Of the chronic cases admitted during the year scarcely 20 p. c. were cured.

The next asylum visited was

THE INDIANA HOSPITAL FOR THE INSANE.

Situated on rising ground about a couple of miles from Indianapolis, the capital of the State, it commands a view of a considerable district of country only partially cleared of the "primeval forest" which still covers much of the great plain that surrounds the young but flourishing city. This asylum, the only one for the State which contains about a million and a half of inhabitants, was founded principally through the energetic action of Miss Dix, whose philanthropic labours in behalf of the insane in this and neighbouring states, will cause her name ever to be held in veneration as one of the benefactors of the human race. At present there are 330 inmates resident, but when the additions in progress are completed there will be accommodation for 500. Only acute cases of disease are admitted; that is, those of less than a year's standing; and no epileptic is received. Not half of the insane in the State, even when the new buildings are full, will have asylum treatment; the remainder are stowed away in prisons and poor-houses, where, I was informed, their treatment is "horrible."

Patients are admitted on the warrant of two justices who must see the person either at his own home or when brought to them, and must also be satisfied with the medical certificate and the statements of the friends. No

payment is received from any one. The rich are considered to have a claim to admission, as they are taxed for the maintenance of the institution. The Board of Management consists of three commissioners appointed by the State Legislature. They, however, as well as the Physician-Superintendent, hold office only so long as the political party to which they belong is in power. Should the opposition be in the ascendant at the next election they would be asked to resign their appointments. Dr. Lockhart has only been four years superintendent; previously he was engaged in private practice. Besides the ordinary duties of his office, the onus of the construction of the extensive additions now in progress rests upon him, though he consults with a small building committee. He engages the tradesmen, and, as there is no overseer, he instructs them as to the details of their work. When completed, it is expected that this new portion will have occupied about two years in erection.

The entire edifice is of brick, and is from three to four storeys in height. It consists of an extensive front, from the extremities of which wings are prolonged backwards at right angles. There are 760 acres of land connected with it. The airing-courts, which have been only recently provided, are small and cheerless, being surrounded by high palings; and there is no view from any of them. They were nearly bare, there being only a little grass here and there on the principal male one. Dr. Lockhart would like to enclose about 40 acres with a high wall so as to enable him to give the patients more out-door exercise than they have at present, on account of the marked disposition which they manifest to elope. He also finds that they are apt to combine among themselves.

The general plan of the interior is the same as that of the Michigan Asylum—a central corridor with rooms and alcoves on the sides. At the end of some of the halls is a small reception-room where patients' friends can see them instead of in the general reception-room; and this is found very convenient, particularly with excited cases. The extraction openings for the ventilation of the rooms and corridors are near the floor, and the working of the system is considered satisfactory. A large fan is in course of construction to force air through the entire establishment. Along with Dr. Lockhart I walked along the main tunnel through which, when completed, the fresh, or fresh and heated air will be forced, and observed its branches to the different departments. We also went up into the attics and looked at the belvederes by

which the used air will escape from the building. The ventilation of some of the single rooms was into a corridor, and in more than one of these a close, unpleasant odour was very evident. The windows of the *strong* rooms are now secured by wrought iron stanchions, as elopements have been frequent. But, besides these, I was shown rooms, or, properly speaking, *cells*, in course of construction, in which the windows—a sort of embrasure—were not far from the ceiling and appeared to me about 8 or 10 inches in depth and about $2\frac{1}{2}$ feet in breadth. However, in connection with these prison-like arrangements, it is right to keep in remembrance that a larger proportion of acute cases is treated here than in many asylums, so that the difficulties of management are proportionately increased. There are some dormitories, one of which is specially fitted up for patients disposed to self-destruction, and is designated in the physician's annual report, "The Suicidal Dormitory." The water-closets are all ventilated from below. Just under the pan a pipe passes off from the soil pipe of the closet and terminates with others in the stalk of the large furnace; the sewers have also a connection with this chimney. Offensive gases are thus removed from both, and, if not entirely destroyed by the high temperature to which they are exposed, they are at least removed from the building, and so widely diffused in the upper atmosphere as in all probability to be rendered innocuous. The halls looked dull, not being well lighted at some points; their walls were lime-washed. There was a lack of engravings and of other objects of interest.

Patients.—As the asylum is crowded, it is difficult to maintain proper order, and this, to a certain extent, might also account for the untidy state of the clothing of a number of the patients. Many, especially of the females, were without shoes and stockings, and, I was told, they "won't keep them on." I saw one young woman with a strait-jacket on, locked in a box-bed with a heavy, grated, wooden lid. She was stated to be getting quite fat confined there, though her condition was by no means good. It was urged that if she had not been so restrained she would probably have exhausted herself by her restlessness. Many of the male inmates had a listless, degraded aspect. This, perhaps, might partially arise from the fact that only a small proportion are employed on the extensive grounds. About 20 women were engaged in sewing or knitting in the general work-room. Violent and destructive patients are put to bed naked in the summer time. It was argued, What was the use of giving them bedding or clothes when their first proceeding, after going into their

rooms, was to tear them to shreds? I observed a few restrained by muffs similar to those already described. The hours of the patients are from half-past four in the summer and five in the winter, in the morning, till eight at night. There being no general dining-hall, meals are taken in the dining-room of each gallery in parties of about sixteen. I saw the tables neatly set for dinner in several of the rooms. They are for the most part allowed ordinary forks and knives, which, however, are all removed before any one leaves the table.

Amusements, &c.—Promiscuous dances are not approved of, as they are considered exciting. There are occasional entertainments by the magic-lantern; bagatelle and croquet are provided; and it is contemplated introducing billiard tables and constructing bowling-alleys soon. There is a good library, which is stated to be largely used. Considerable parties take walking exercise in the grounds when the weather permits, though, as already said, this liberty cannot be granted to many, owing to their disposition to escape.

About 100 out of the 330 patients were getting special medical treatment. Most of the females were using iron in one form or another; opium is given in large doses in cases of acute melancholia. Many are taking bromide of potassium in 30 gr. doses; no medicine like it, in Dr. Lockhart's experience, in its influence over epilepsy *and in repressing the habit of masturbation*. In those addicted to this vice he had formerly tried the effect of a silver ring through the prepuce to prevent its retraction, but in their efforts to continue the vile practice it had been torn out. The system of dispensing the medicines is similar to the plan in the Michigan Asylum, and is very favourably spoken of.

To give an idea of the substantial character of the food, I append the dietary for two days, extracted from the diet-table of the establishment.

WEDNESDAY.

BREAKFAST.—Meat, bread, butter, coffee.

DINNER.—Meat, boiled potatoes, hominy, beans, cooked onions.

SUPPER.—Bread, tea, pie-plant pies.

THURSDAY.

BREAKFAST.—Fried potatoes, cold meat, coffee, bread.

DINNER. { *South Side*.—Soup, potatoes, hominy, corn and wheat bread.
 { *North Side*.—Meat, potatoes, hominy, corn and wheat bread.

SUPPER.—Bread, tea, cold meat, molasses.

Animal food is given at least twice every day.

Attendants.—The proportion of attendants is one to eleven or twelve patients. Much difficulty is found in getting good

ones. After their patients are in bed they are permitted to meet together for three-quarters of an hour every alternate night. They are granted leave of absence from the institution every second Saturday evening, and every second Sabbath. A night attendant on each side visits the wards every two hours, and gives the medicines when ordered; the male one also makes the round of the buildings outside.—Visitors are admitted daily from two to five p.m., and sometimes as many as a hundred are shown over a large part of the asylum and see the patients, who were stated not to resent this inspection, nor was it much complained of by the officials.

CINCINNATI ASYLUM.

This, the principal asylum of the State of Ohio, is beautifully situated well up the side of an elevated ridge, about seven miles from Cincinnati, the "Queen City of the West." It commands a fine and varied prospect of rich, undulating country, woodland and cultivated fields alternating in pleasing variety. It is very conveniently situated, the main road from the city running at the bottom of the grounds, and the railway station at the village of Carthage, in the valley, is only about five minutes' walk distant; a canal also runs through the grounds in front, about a hundred yards from the main building. These facilities of access, though desirable in many respects, are complained of as a disadvantage on account of the very large number of the friends and relatives of the patients who are thereby induced to visit the institution; and as they are freely admitted to many of the halls and rooms, their visits not only encroach on the time of the officials, but in some instances even exert a prejudicial influence on the mental condition of the insane.

The asylum is of brick, and consists of a central building five storeys in height, in front of which is a fine portico of three storeys. This is reached by a flight of steps leading into a lobby, that terminates behind in the rotunda—a large hall in the centre of the edifice, nearly ninety feet high, and lighted from above through the great dome, which, on the outside, forms the most striking feature in the aspect of the institution. Around the rotunda are five corridors, communicating with the halls on each floor. From the central building extend laterally two wings three storeys high, and intersected at regular intervals by cross buildings of four

storeys, one of which on each side is surmounted by a small dome.

There was a fine collection of American singing birds within the portico, whose notes were very pleasant to listen to while wending our way up the somewhat steep road leading to the main entrance. After a courteous reception from Dr. Langdon, the physician-superintendent, who has had the management of the asylum since its erection, about eight years ago, he showed me over the greater part of the house.

The general arrangement of the wards is much the same as that of the asylums already described, viz., a central corridor with rooms on each side. These corridors or halls are broad, well lighted, and cheerful, the dimensions of some being 124 feet in length, twelve in breadth, and thirteen in height. Connected with each are the dining-room, parlour, and bed-rooms (8 by 12½ feet), many of which accommodate two patients. The seclusion rooms are very secure, the windows being protected by thick iron rods. They have a square inspection opening in the door, and in the corner of each is a fixed night-stool, which can be flushed and emptied by the attendants without going into the room. There are some dormitories, the largest containing about fourteen beds. The attendants' rooms have a window looking into the larger dormitories, but no attendant sleeps among the patients. The bath-room, the water-closet, and the drop for the dirty clothes are at the end of the main hall, but shut off from it. In each dining-room is an elevator for the food. The bareness of the walls is relieved by a goodly number of appropriate engravings; singing birds in cages are to be seen here and there; and fine collections of flowers in pots are placed at the end of some of the galleries. The furnishing throughout is good, but particularly so in the department for the private, or *pay patients*, as they are called; for here they are kept apart from those supported at the public expense. There is no fan used to assist the ventilation of the house; Dr. Langdon thinks it sufficiently good without it. He believes that the working of the fan is very apt to be neglected at night, when it is most of all required. There is a downward and outward current from the halls, rooms, &c., to a large air-duct in the cellar, which underlies the entire length of the establishment, and terminates in the chimney-stalk. This stalk contains a number of flues from the boiler, washing-house, gas work, &c., which heat the air around and cause an upward current.

The water-closets have also a downward ventilation to this stalk.

The amount of land connected with the asylum is only about 38 acres, and is felt to be much too limited. Quite recently, with the concurrence of the Physician-Superintendent, two pretty little lakes have been formed, about forty or fifty yards behind, and to the side of the main building. They certainly add greatly to the beauty of the establishment, whatever opinion may be entertained regarding their safety. I have also said that the canal divides the grounds in front, along which boats are plying at all hours of the day.

Patients.—Upwards of 400 were resident at my visit. Both in person and dress the condition of the great majority was all that could be desired. However, some of the inmates of the wards for the demented class, and also those for the more unruly, had a slovenly aspect, several being without shoes and stockings. A few of the excited ones wore the camisole, and two who were so restrained were in seclusion. One who was walking about in the hall, in addition to the waistcoat, had her arms fixed to her sides by leather belts, connected with one which encircled the body. I was informed that there had been only one suicide in the canal, notwithstanding its proximity, during the eight years of the existence of the asylum, and that there had been none in the lakes; but they, as before stated, are of very recent formation. I saw a number of tables very neatly arranged for dinner. All, except the violent class, use ordinary forks and knives at meals. The food is not served in rations; each has as much as he desires. A good many of the men work on the grounds, their hours being from seven to eleven a.m., and three to five p.m., thus avoiding the hottest part of the day. Very few assist in the workshops. I did not notice many of the females employed, although a good deal of sewing is stated to be done by them. In the winter there are promiscuous dances (males and females together) twice a week. Entertainments by the magic-lantern are frequent. There are also a bowling alley, quoits, ball, billiard and bagatelle tables, chess, dominoes, draughts, and backgammon. There is a small zoological collection, including the bison, black bear, monkeys, foxes, cranes, &c.; and in this connection I must not omit to notice the very fine pack of hounds and hunter belonging to the physician.

A large number of both sexes take walking exercise in the grounds; but as there are no airing-courts, if violent and destructive, they are confined to their halls and rooms. There is a chapel, but no chaplain. It was stated that the patients belonged to a great many different sects, and that it was very difficult to get a clergyman who would not do mischief by his discourses and instructions; so it was thought that the best solution of the difficulty was to have none at all. Clergymen are, however, freely admitted to converse with those belonging to their own denomination; and a considerable party is sent down pretty regularly to church in the village.

Attendants.—Their wages range (with board) from 15 dols. to 28 dols. (45s. to 84s. at current rate of exchange) for females, and from 18 dols. to 33 dols. (54s. to 99s.) for males per month. Both males and females are permitted to meet together at night between 8 and 10 o'clock in the rotunda; and as this is the most central part of the building and is overlooked from the respective flats above, improprieties have not resulted from this much prized privilege. There are two night attendants, besides a watchman for the grounds and the exterior of the buildings.

The Department for Coloured People.—This is a most interesting portion of the establishment. The fine mansion-house in which they reside has only lately been acquired. It is situated just on the other side of the road which skirts the asylum grounds, is three storeys in height, and has a handsome portico in front. There are only nine inmates. The majority are cases of dementia; one intelligent looking creole was maniacal. Two were in seclusion. The furnishing and all the other arrangements were very good; and, in fact, the patients seemed to be fully as well cared for as their pale-faced brethren of the same class.*

NOTE.—It will be observed how powerfully the *race* feeling operates, inasmuch as a separate establishment with all its additional expenditure must needs be provided for nine coloured people rather than permit them to mix with the inmates of the general asylum, or even to give them separate wards in the same building. But with the exception of this repugnance to associate with them—very excusable when we remember the relative position of the two races, as master

* On remarking a somewhat singular looking cat in one of the rooms, I was told it was an African one—not inappropriately placed there!

and slave, so lately, in their near neighbourhood (Kentucky)—it must be admitted that all the arrangements for their care and treatment are on a most liberal scale. In short, the condition of this department, and indeed of the asylum as a whole, is highly creditable to all concerned with the management, and to the city of Cincinnati itself.

In connection with the coloured people, I received some interesting information from Dr. Rodman, Superintendent of one of the Kentucky Asylums, whom I was so fortunate as to meet along with the Superintendent of the other asylum in that State while visiting Longview. He stated that his experience among the insane of the coloured people in Kentucky had been very extensive, and that he had arrived at the following conclusions :—1st. That previous to the acquiring of their freedom there were more negroes insane than was generally supposed. They did not then readily come under public notice, as their masters usually kept them at home, if not absolutely unsafe, because they could be supported more cheaply there than in an institution. 2nd. There are proportionately more imbeciles and idiots amongst them than among the whites. During the existence of slavery, he said, imbeciles were easily overlooked, for the negro labourers on a plantation were employed, as a rule, at work of so simple a kind that, even though very deficient mentally, they could do it, and therefore little notice was taken of their feeble mental power. 3rd. Making full allowance for the additional number who have become known to the authorities owing to their former masters being no longer responsible for their maintenance, there has been a decided increase since the war—or rather, since obtaining their liberty. This he ascribed especially to the increased, and, to them, excessive exercise of their brains in seeking to provide for themselves and their families, and generally, in the exercise of their new rights as freedmen.

Legal Forms in Kentucky.—Dr. Rodman said that before a poor person—*i. e.*, one maintained at the public expense—can be confined in an asylum in this State, a writ *de lunatico inquirendo* must be issued and a jury impanelled, before whom the alleged lunatic is brought. Should it appear to the jury that the evidence submitted is not sufficient to establish insanity, they ask experts to examine the persons under inquiry, so as to assist them in coming to a conclusion. In the

case of those whose means are sufficient to support them, their relations can bring them to the asylum without a medical certificate, and the Superintendent can receive them, if convinced of their insanity. Dr. Rodman said that he generally insists on their being taken before a jury, though this is not required by the statute.

Restraint.—Referring to the use of mechanical restraint in American asylums, this gentleman said that in Kentucky they had a large number of desperate fellows who, when in their sound senses, were regardless of life, and in whom, in many cases, insanity intensified the worst features of their characters. He was convinced that, if they were not so restrained, homicides would be of not unfrequent occurrence.

GOVERNMENT HOSPITAL FOR THE INSANE, WASHINGTON.

Under the shelter of a covered "buggy," on a day of intense heat, after a three miles' drive from the Capitol, across the Potomac and up the steep incline on the other side—my sable driver, a freedman, meanwhile telling me in his child-like language about how much he liked his freedom, that now he had his mother staying with him, whom he had never before seen since he was a child, and that when he was a slave he had not "good clothes like these," pointing to the coarsest of coarse woollen trowsers, but had to wear sacking like what the potato bags are made of—we arrived at this institution. The site is an elevated one, and commands a wide and varied prospect—most interesting, perhaps, southward towards the city and Capitol, where the busy scenes on the river, ordnance experiments, launches, &c., must attract the notice and relieve the monotony of the secluded life of the inmates. "The ground plan of the main edifice has been appropriately denominated an echelon. It is a modification of what is known in this country as the Kirkbride or Trenton plan, and is thought to embrace peculiar advantages in respect to classification, light, and spontaneous elevation, and in presenting the broken outline of a castle or villa. The façade of the building is called the Collegiate Gothic style, and is thought to be appropriate and also highly effective in view of its plainness and the cheapness of the materials in which it can be represented."* The general effect of this style is unusual and somewhat striking, but it can scarcely lay claim to much architectural beauty. All the buildings are of brick.

* Annual Report for 1860.

The grounds comprise two hundred acres, and the Board of Management are in terms at present for acquiring about two hundred more, as they are anxious to be able to supply the institution with everything of farm produce. The soil is rich, "and affords, fresh and abundant, the luxuries of the garden, the farm, and the dairy." About forty-five acres are appropriated to the buildings, drives, walks, ornamental trees, and shrubbery. The river runs along one side of the grounds, without wall or fence intervening.

The management consists of a board of nine visitors, to which Dr. Nichols, the principal physician of the asylum, acts as secretary. This gentleman is also "Superintendent of Construction," and in this capacity makes a separate report (published along with that of the board) to the Secretary of the Interior, the asylum being immediately under the control of the supreme government. There are three resident qualified medical assistants, all of whom are married. Each of these gentlemen is attached to a department, and is responsible for it. In special cases he consults with Dr. Nichols, who also gives the tone to the general character of the treatment and discipline.

Dr. Nichols was from home, but I was courteously shown over the greater part of the establishment by one of his assistants.

The entrance hall is rather dull, and a hanging stair in its middle, unconnected on all sides, has a somewhat singular appearance. The galleries are central, as in the asylums already described, and are well lighted and cheerful. The bedrooms are of large size, but some contained two beds. The largest associated dormitories are for only six patients, and there are upwards of twenty with only four beds. Each hall has its own dining and day room; separate from it, at the end, are the *single* bath room and water closet, in an offshoot from the main building. The seclusion rooms, judging from the one of the range I was in on the male side, are large, well ventilated, and have each a fixed iron night-stool in the corner. The furnishing of the various apartments was generally good, in some parts very superior, more particularly in the "officers' quarters." For instance, in the dining-room of one of their halls I was shown a fine and complete dinner service. All the knives and forks in use are of an ordinary pattern; the edges, however, are not very sharp. In the alcoves of the galleries and elsewhere there were flowers in pots, some of which were in full bloom, and

looked very pretty ; and even at the end of the hall for the excited class, there was a fine collection, protected, however, by a stout iron screen of trellis work. The halls themselves are lined with different woods, by which they are named. Thus there are the walnut, oak, ash, beech, sycamore, maple, poplar, cherry, cedar, chestnut, locust, birch, and spruce halls.

Patients.—The total number under treatment on 30th June, 1867, was 185 males, and 96 females—281. The majority are from the army and navy, but some are private, as the asylum is for the district of Columbia. The district cases are admitted on the certificates of two medical men, with the consent of the Physician-Superintendent. An order of admission by the Secretary of the Interior, granted on medical certificates, is given for those sent in from the public departments. All classes are received and retained, and there is consequently a large proportion of chronic incurables resident.

Some of the acute cases among the males were apparently rather violent, at least I inferred so from the noise in more than one of the seclusion rooms. As means of restraint, leather muffs are used for the males, and strait-jackets for the females. A man of colour was walking about quietly in the hall adjoining the strong rooms, with his arms firmly secured in stout leather muffs. He was stated to have been violent and excited for six months, and it was considered that it would be dangerous to attempt to dispense with the use of mechanical restraint in his case. They seemed tight about the wrists ; but on remarking that, I was assured that they did not chafe the skin. I did not see the acute cases among the females.

From 25 to 30 per cent. of the males work on the farm, and this form of occupation is much esteemed as a remedial means. A few are employed in the tailor's and shoemaker's shops. There are three lecture nights in the week during the winter, and a lecture, exhibition, or festival is occasionally given in the summer. If they can secure the services of lecturers from the city they are very glad, but, if not, the medical assistants give an exposition in turn. One lectures on chemistry, with experiments ; another gives views, &c., with the magic lantern ; the third takes up another class of subjects. Such lectures as are most demonstrative are the most successful, and, as a rule, they are much liked by the patients. There are also occasional dances in the winter, but this form of amusement is not held in much estimation.

Regarding religious ordinances, I quote the last annual report as follows:—"On the first Sabbath of July, 1866, the plan, previously matured, went into effect of having the religious services in the chapel of the hospital, conducted in turn by six associate chaplains, representing the six leading denominations of the district. Each chaplain preached in the afternoon of every Sunday for two months in the year, and, as occasion required, attended the sick of his faith throughout the year, and the funerals of such as died and were buried in the hospital cemetery. Under this system the patients of all denominations are generally willing to attend all the services; much more willing than under any other system which we have tried. Under it each patient receives the same concession to his sectarian prejudices from others which he makes to them, and it has worked so well that it has been continued into the current year. It is the rule of the house that all patients who are able shall attend all chapel services."

Each of these gentlemen is paid 100 dollars (about £15 current exchange), for his services. There is a fine organ in the chapel.

Causes and results.—Dr. Nichols remarked a decided increase in the proportion of admissions from amongst the recruits during the latter years of the war than in the earlier periods, and he attributes this to the fact "that the latter accessions to the union armies include a larger proportion of men who are more readily affected by the exciting causes of insanity than were to be found during the first two years of the war." Last year "the deaths were eight and a half per cent. of the whole number under treatment, and thirty per cent. of the discharges, including deaths." The death-rate is stated to be above the average of previous years. In connection with the proximity of the river, I was interested to find that there had been only two suicides in it since the erection of the asylum.

The cures are estimated on the *discharges*, thus:—"The recoveries were sixty-six per cent. of the discharges, and forty-six per cent. of the discharges and deaths."

In his last annual report, Dr. Nichols enters into the legal and medical questions affecting dipsomaniacs, the subject being suggested by the admission of an unusually large number of cases of that kind during the year. In the course of his remarks, he says—"In relation to confirmed inebriates, we believe the desideratum of this particular time is a public judgment distinctly expressed in the State constitution and

laws, and expounded and enforced by the courts, that they are dangerous to themselves and others, and may and should be legally subjected to prolonged restraint, both for the protection of society and for their own protection and reformation." But he afterwards adds, "A more efficient system of reformatory restraint requires the authority of laws that have hitherto been enacted by one State only, and a court of that State has since decided that they are unconstitutional."

I regretted that I did not see the lodges for the coloured people, which are apart from each other, on the grounds at some distance from the main building.

THE MARYLAND HOSPITAL FOR THE INSANE, BALTIMORE.

This, though regarded as the main institution for the insane in the State of Maryland, only accommodates 130 patients; as many more are in Mount Hope asylum for Roman Catholics, in the neighbourhood of Baltimore. The Jews have a small but well managed establishment, for members of their own persuasion, close to the principal hospital, and about 300 are confined in the almshouse, where, it was stated, the treatment is *far behind* that of the other asylums. A new hospital is, however, in course of erection for 500 patients, to which, when completed, it is intended that all the insane poor in the State shall be sent; and the Maryland Hospital will then be retained for private patients alone.

This asylum is a large brick building, and occupies an elevated site in the eastern part of the city of Baltimore. There is a good view, both of the city and of a fine district of country around, to be had from the tower, and also partially from the upper flat of the establishment, but there is none from the under flat, which is below the level of the ground in front. Thirty-six acres of land are attached, and laid out, for the most part, as pleasure grounds. There are airing yards, but they are small, cheerless, and surrounded by high walls. All the galleries are narrow and ill lighted. So dark were they on the basement storey that though the day was one of unclouded brightness, at some points patients seated by the walls could not be readily seen. These lower galleries are floored with brick, and were admitted to be damp. Here, for the first and only time in American asylums, I found an approach to the general dining-room arrangement, there being a room for the males and a corresponding one for the females, each capable of holding about thirty, in which patients from several galleries, but not

from all, meet for meals. Besides the general visitors' room, there is a small one at the end of each hall, where the inmates can be seen more privately. The seclusion rooms are provided with two doors, an outer grated one, and an inner one of an ordinary kind. Many of the bed-rooms have their windows protected on the inside by strong iron stanchions. In the day-rooms for the more excited, the seats are fixtures along the walls. There is a lack of engravings, flowers, &c., though there are a few prints in the rooms and halls of the quieter class. The heating is by the circulation of hot water in pipes, ugly piles of which, in coils, were exposed in the centre of some of the rooms, and on the sides of the galleries.

Very many of the patients in the lower flats were bare-footed; some had shoes on without stockings, and their dress generally was slovenly. One man was walking about quietly with his arms secured in leather muffs; and a woman was in seclusion with a strait-waistcoat on. I passed another room in which there was a violent patient; but, as the door was not opened, I did not see his condition.

A few, but not many patients are employed on the grounds, and two or three work at tailoring and in the engine-house. In the winter there are occasional dance parties; no lectures are given. Croquet is the only out-door game. No patient is allowed to walk about the grounds without an attendant.

Inebriates are admitted freely; and I was assured by Dr. Stewart, the medical assistant, that cases of mere drunkenness are sometimes sent in. For such cases, an application by a citizen of Baltimore, who must become surety for the payment of the board, and a medical certificate, in the following form, are required to procure admission:—

[MEDICAL CERTIFICATE.]

—, 186—.

I hereby certify that —— is *non compos mentis* from intemperance, and ought to be placed in an Hospital for the Insane.

—, Physician.

Physician's P.O. Address.

The Board of Management consists of thirty-three members, representing the various counties of the state and the City of Baltimore, who elect from themselves a small executive committee. The President of the Board *must* be a medical graduate, and he receives a salary for attending to the interests of the institution. The Medical-Superintendent has the special charge of the asylum; but "in all unusual events

he must consult the president or the executive committee." The regulations for the assistant-physician require him to "preside at the table of the best class of patients in the male department;" and further, "he shall be a married man, and when visiting the females he must always be accompanied by a proper female attendant."

THE PENNSYLVANIA HOSPITAL FOR THE INSANE.

This institution is situated in the western suburbs of Philadelphia, and is conveniently reached by the street cars which run to within a few yards of the gate of the hospital. The male and female departments are entirely separate; each has its own grounds, and is enclosed by a special wall, about nine feet in height, a "creek,"—as the small streams are called—running between on neutral ground. The domestic arrangements are also independent of each other, all that they have in common being the bake-house.

The female division, much the older of the two, is three storeys in height, and consists of a principal building about three hundred feet in length, with wings at the extremities, which recede to a considerable distance, and also advance beyond the line of the main front. On each side of the wings, at a little distance, are pavilions for the museums and reading-rooms. A dome surmounts the centre of the edifice, and there is a belvedere over each wing at its junction with the central block. A flight of steps leads up to the portico and colonnade at the chief entrance. Just opposite it is a fine *jet d'eau* in an ornamental basin. The groves around are very beautiful, but interfere much with the view from the halls and day-rooms. The pleasure grounds and gardens, inclusive of the deer park, amount to forty-one acres. Fifty acres are attached to the male hospital.

Dr. Kirkbride, the "physician in chief and superintendent," was from home, but I was courteously shown over both departments by the assistant-physicians.

Here again we have the central halls or corridors, with rooms and alcoves on either side. The halls are broad, lofty, and well lighted. Connected with each is the special dining-room, with the "dumb waiter" at the end; there is no general dining-hall. The bedrooms are mostly single; a few have two beds. The male department, built about eight years since, has the larger halls and rooms. To the left, as you enter, is the lecture-room, seated for nearly a hundred, the

backs of the seats being reversible like those in American railway cars, so as to permit of the spectators looking in the opposite direction, when a demonstration with the magic lantern is given. The heating of the new building is by steam, the pipes being within the walls. The hot air is admitted below, and the extraction openings are near the ceiling. A fan has been erected in connection with the great air-ducts (through which we walked), but Dr. Jones, who has special charge of this department, said that it is not used, *as the ventilation is quite sufficient without it.* This gentleman attached much importance to the downward ventilation of the water-closets, which is effected by an arrangement similar to what I have described in connection with other institutions.

The furnishing is good throughout, in some parts superb statuary, engravings, &c., adding to the amenities of the wards. In the female side, on the main staircase, is West's celebrated painting of "Christ healing the sick," originally presented by the artist to the sick hospital, but afterwards removed to the asylum.

Two museums are connected with each department—a geological and a zoological one; the collections are good, extensive, and in excellent order. The gentlemen have two reading-rooms, one for newspapers, the others for books and journals; the ladies have also a reading-room for themselves. These museums and reading-rooms, being a little way from the main building, are pleasant places of resort for the patients when taking exercise in the grounds. Besides the larger libraries belonging to the reading-rooms, I observed in many of the parlours small book-cases filled with books of general interest.

Employment.—The female patients sew and knit a good deal; not much work is done by the males, though facilities are offered for mechanical occupation in the workshops. It is, however, to be kept in mind, in connection with the latter observation, that the great majority of the inmates belong to the wealthier classes, and have not been trained to manual labour. Only forty are free patients, that is, have been admitted without payment on the recommendation of those who have subscribed 5000 dols. (£750 current exchange) towards the building or furnishing of the asylum, subject to the selection of the directors from amongst those recommended, who endeavour to choose those most suited in education, habits, and manners to mingle with the society of the house. The gentlemen spend much of their time at the billiard table,

reading, walking, &c. A number of the ladies play billiards, a few having learned the game before admission at private tables; but the majority have been taught in the institution. They have a private billiard room in the grounds containing two billiard tables, in addition to which there is a parlour oneindoors for their special use. In the pavilion billiard room, standing out prominently, there is a printed list of games, nearly a dozen in number, in which the ladies engage from time to time, according as they feel disposed. Besides these, they have a gymnasium—a fine hall in which they practice light gymnastics with wooden dumb-bells and rings on two nights of the week. On an average, about thirty take part in the gymnastic class, the exercises being accompanied by music. On the floor of the gymnasium outlines of feet are painted to indicate the various positions in which the ladies are to stand in different movements. But in connection with the means of occupation, a short extract from Dr. Kirkbride's last annual report will give the best idea of the system carried out:—"As usual the season was of nine months' duration, and at the department for females every evening during that period was occupied. Three evenings were devoted to lectures, concerts, or the exhibition of dissolving views, always with music in the lecture room; two to gymnastic exercises in the hall put up for that purpose; one to reading the Bible and sacred music in the lecture room; and one to tea parties in the officers' departments in the centre building—the number present at these last being limited only by the capacities of the tables. At the department for males, the regular course is the same, with the exception that in place of the light gymnastic exercises and the tea parties, the patients on these evenings use the fine billiard tables, the ten-pin alleys, or the various other games that are provided in the wards or in close proximity to them." Regarding the tea parties he says, "No ward has been omitted from its regular turn; every one has sent a large majority of its inmates; while from several there has often been hardly a single patient absent. All the officers resident at the hospital, with the ladies of their families, are generally in attendance, and nothing material has ever occurred to mar the satisfaction of those who have participated in these very pleasant and useful entertainments." The lectures are an hour in length. The medical officer admitted that only a small proportion of the patients present could understand them.

Restraint and Seclusion.—The camisole is occasionally used for violent and destructive females; similar cases among the men wear leather wristlets with belts round the body, to which the wristbands are fixed, leaving the fingers free. It was stated that not above one per cent. of the men are so restrained. Two or three of the ladies were in seclusion at my visit whom I did not see, but the others among the excited class who were in the day-rooms or walking about in the halls were tolerably quiet, and their clothing was in good order. The locked bed is not in use; but I was informed that in some cases where there appeared to be a risk of patients exhausting themselves by constantly maintaining the erect posture, straps are placed across the bed so as to enforce the horizontal position, while freedom of movement from side to side is not restricted.

Medicinal Treatment.—About a third of the patients take medicines, mostly tonics and sedatives. Baths are not given for longer than half an hour. Dr. Jones said that he had been prescribing Calabar bean lately in certain cases resulting from sunstroke, but his observations had been too few to warrant conclusions.

Hours, &c.—The gentlemen get up at 5 a.m. and breakfast at 6; I have not noted the hours for the ladies. Ordinary knives and forks are used at table, but the edge of the knives is not very keen.

Attendants.—The females especially are a superior class; they have 12 dols. per month and board (£2 16s. current exchange). Both males and females are allowed an afternoon every fortnight and every third Sabbath to themselves.

Forms of Admission.—One certificate of insanity from a respectable graduate in medicine, in the simplest form, without evidences, with an application from a near relative or friend, is sufficient warrant for the reception of a patient into the asylum. Dr. Kirkbride makes special reference to this ease of committal in his last report: he says, “After more than thirty years’ experience among the insane, and with a personal knowledge of considerably more than five thousand patients, I am glad to be able to assure those who have fears to the contrary that, with a careful scrutiny, I have not discerned anything even in cases of doubtful insanity, to make me believe that the friends of the patients have been actuated by improper motives.”

NOTE.—This institution, though called the “Pennsylvania

Hospital for the Insane," is very far from accommodating the great body of the lunatics in the State. There is another asylum at Harrisburg, which is stated to be crowded, and very many are still in the almshouses and prisons, besides those detained in private houses. Elsewhere, in the course of my tour, I was informed on good authority, that the provisions for the care and treatment of the inmates of these places is far from being satisfactory or creditable to so old and wealthy a State as Pennsylvania, and contrast very strongly with the admirable arrangements of the establishment above described.

BLOOMINGDALE ASYLUM FOR THE INSANE, NEW YORK.

This institution is for the wealthier classes, though formerly a small proportion of the inmates consisted of persons reduced in circumstances, whose previous social position, education, and habits corresponded with those of the patients generally, and who were admitted at reduced rates of board. In consequence of the increased cost of maintenance during late years, this class has latterly been almost entirely excluded; though Dr. Brown, the Physician-Superintendent, has been urging that provision should be made for them in the new asylum about to be built.

The main building was erected about fifty years since, and at that time the site was considered by many to be too remote from the city, but in consequence of the rapid growth of the latter and the extension of the avenues in the near neighbourhood, the privacy of the inmates cannot now be sufficiently maintained: hence the determination of the directors to remove the asylum to a more suitable position.

The grounds, forty acres in extent, are finely wooded, so much so, in fact, as to interfere considerably with the prospect which the admirable site would otherwise command. The female wing is of recent construction, but the central block, which is four storeys in height, as already said, is old. The general plan of the interior being the same as that of the asylums already described, it is not necessary to describe it particularly. The wards are elegantly furnished, and their attractiveness is further increased by fine collections of flowers at the ends of the halls. Airing courts are attached (unlike several of the American asylums visited), and there is a verandah in the centre of the male one.

There are 170 patients resident. Belonging as they do to

the upper ranks, little or no work is done, except sewing, knitting, and such like by the ladies. There is a weekly lecture by Dr. Brown or his assistant, the subject varying; sometimes chemistry with experiments, or natural history furnishes the illustrations, or, it may be, a demonstration with the magic lantern. The meetings are held in the chapel, the seats in which are reversible as in the Philadelphia asylum. There are also occasional dances, at which the ladies and gentlemen meet together; and it happens sometimes that friendships between the sexes are thereby formed. The ladies have a special billiard table.

The more excited class have each a separate department at a little distance from the main buildings. The windows of the male one are protected inside by vertical strong iron stanchions; on some of the staircase windows the stanchions are horizontal. I noticed one locked box bed, the lid of which, consisting of wooden spars, was arched, instead of being flat and level with the margin of the bedstead, as I had seen in other asylums.

A violent male patient, suffering from recurrent mania, was secluded with a strait-waistcoat on; another was walking about the corridor with his arms secured by the same means; a third was restrained by "muffs." In rare cases patients are bound down to their beds by straps around the ankles, which are fixed to the bottom of bedsteads, and by others around or across the body—I am not sure which.

This class, as also, of course, all the others, were clean in their persons, tidy in their dress, and their apartments were in excellent order.

Even in these separate buildings, ordinary knives and forks are supplied to the patients who are able to sit at table. Though there has been a remarkable immunity from attempts at suicide and homicide, considering the facilities presented by the use of knives with cutting edges throughout, yet one or two occurrences have indicated the danger connected with this practice. Thus, a gentleman (lately removed to Morningside asylum in this country) suddenly jumped up without warning, and plunged his knife into the patient next him, the blade entering at the back part of the vertex of the head, and emerging at the nape of the neck. Dr. Brown mentioned another case which had come under his notice in an asylum, where a patient who was previously considered perfectly safe, and was in the habit of assisting the attendant to serve dinner, one day seized the carving-knife, and ripped up her

own abdomen, from which she died. The attendant, who accompanied me through the wards for the excited class, told me that on one occasion a patient seized the carving knife, and was about to thrust it into his (the attendant's) person, when he succeeded in wresting it from him.

Forms of Admission.—“In accordance with the revised statutes of this State, it is necessary, before a patient can be admitted into the Bloomingdale asylum, that a lunacy warrant from any justice of the peace, or police magistrate of this city, issued upon the evidence of two reputable physicians as to the alleged facts of insanity, be procured; and also a permit from one of the asylum committee, &c.”

Management.—There is one Board of Management for the New York Sick Hospital and this institution, who appoint an asylum committee of six members to attend to its interests. The reports of the two establishments are published together.

NEW YORK CITY LUNATIC ASYLUM.

The City Penitentiary, the alms-house, the hospital, and the workhouse, along with the lunatic asylum, are all situated within a few yards of each other on Blackwell’s Island in East river, the channel communicating with Long Island Sound, which separates Brooklyn from New York proper, and occupy the entire island. An immense population has consequently been crowded into a small space; and this, besides the gross faults in management, to some of which I shall refer in connection with the asylum, has probably contributed largely to the spread of the severe epidemics of disease, with which all these institutions have, from time to time, been visited. Whenever any of the epidemic contagious disorders appears in one establishment, it almost invariably visits the others. Generally it originates in the workhouse. Thus, four years ago, typhus fever extended to the asylum, when a large number of patients died from it, besides some officials, including the physician-superintendent; and two years since, seventy patients perished from cholera. Scurvy has also been of frequent occurrence amongst the inmates.

The asylum has long been over-crowded. This will be very evident from the statement in the last annual report of Dr. Parsons, the energetic superintendent, who, let me say, in that report, faithfully brings many of the leading defects of the arrangements under the notice of the board of directors—

that, on the 31st December, 1867, of the 895 patients in the asylum, 304 slept on the floor, there being only 591 bedsteads in the wards; and I was convinced that there is not sufficient room even for these, as they are much too near each other, and rows of them occupy the centre of the large dormitories where sixty sleep together, besides those placed in the usual way along the side walls.

Many of the bed-rooms are small and dark, having no windows, and are dependent for light and air on small openings into the corridors. I was in several which had a close, urinous odour. In a large proportion two patients sleep together; and as they contain only about seven hundred cubic feet, it is clear that the atmosphere must become oppressive during the night, more especially in hot weather, such as at my visit, when the thermometer was standing at 100° Fahrenheit in the shade. There had been but few mishaps from this arrangement, but it was admitted that there had been a homicide in a bed-room in the course of last year, and one also in the year before.

The violent patients are kept apart from the main body in a separate building, where the males are located in the low flat, and the females above. Here many of both sexes were walking up and down, highly excited, in the narrow corridors adjoining their bed-rooms and seclusion rooms; several were restrained in strait-waistcoats, or by leather wristlets. A few were secluded. Bed straps are used, it was said, in exceptional cases of violence—that is, such patients are tied down to their bedsteads. A large proportion are constantly confined in these galleries and rooms, there being no airing-courts in which the excited class can get out-door exercise; some, however, walk in the general grounds of the establishment.

Mechanical restraint was not confined to the department for the excited class. In going through the main building I observed a man in one of the corridors tied to his seat by a rope. When I spoke of his condition, it was said that he was subject to erysipelas of the leg and that this plan had been adopted to restrain his movements that the limb might get rest. It unfortunately, however, failed to accomplish the end in view, at least if the horizontal posture were intended, as he could get up off the seat, and he was sitting when we passed.

Much disorder also prevailed in a number of the wards of this part of the establishment, many of the patients being

stretched on the floor of the halls, some excited, others in a listless, moody, or apathetic state. Their position, however, seemed very much a matter of necessity, as there was apparently not a seat for each, had they been all anxious to sit down at the same time. Both there and in the "Separates" a large number were barefooted, and their clothing was untidy and ragged in the last degree. I noticed a man in one of the halls nearly in a state of nudity,—his breast uncovered, his feet, legs, and forearms bare, and the clothing he had on hanging in tatters about his body, thighs, and upper arms. No remark was made about his condition, and it did not seem to attract attention as in any way extraordinary.

As I have said, great excitement prevailed, more especially in the wards for the acute and violent cases. Never, in fact, have I visited any institution for the insane where the noise and confusion were so bewildering, nor where I experienced the same feeling of relief on leaving.

I inquired particularly regarding the views and experience of the officials in connection with the proximity of the river. It was urged that it effectually prevented elopements; but, on the other hand, suicides by drowning were admitted to be rather frequent. There had been four between the beginning of the year and the date of my visit (26th June); and in this it was considered that they had been unusually fortunate.

A considerable amount of work is done by the patients. Thus, from the official return for 25th June, it appeared that of the 1,129 patients resident 194 had been employed four, five, or six hours, for the most part, on the grounds in building sea wall, &c.; and besides these 139 had done light work.

The proportion of attendants is one to thirty patients. If the proportion were greater, it was said, the accommodation for the insane would be encroached on still more, and it was little enough already. The wages per month of the males are 32 dollars (£4 16s., current exchange); females, 16 dollars (£2 8s.); these sums being, of course, in addition to board.

Besides the main building and the separate one for the excited class, there are a number of pavilions under the same general management; one being for idiots, one for insane epileptics, and another for those considered sane, and one for sane paralytics. The patients there occupy the same wards night and day, except that they dine in a separate room attached to each pavilion. I was informed that in high tide the water from the river rose to the under surface of the flooring of the pavilions.

Through the representations of Dr. Parsons, in the course of last year, a gymnastic hall had been erected, which was proving a valuable addition to the institution. Classes from various galleries in the asylum besides the pavilions had been formed, and each in its turn practised light gymnastics, the performances being usually accompanied by music. Dr. Parsons, in his report, speaks in the highest terms of the usefulness of this form of employment in furnishing patients, *especially females*, with healthful exercise. Concerts, views with magic lantern, dances, &c., also contribute to their amusement and instruction.

Another important improvement introduced at the physician's instance during last year is a more liberal and varied dietary. The scale for two days will show its character.

TUESDAY.

BREAKFAST.—Coffee or tea, milk and sugar, boiled beans, bread.

DINNER.—Irish stew, bread, baked Indian, rice, or bread pudding.

SUPPER.—Tea, milk and sugar, bread and butter.

SATURDAY.

BREAKFAST.— Coffee or tea, milk and sugar, hashed meat well seasoned, bread.

DINNER.— Boiled beef, slightly corned, with boiled cabbage or turnips, bread.

SUPPER.—Tea, milk and sugar, bread and butter.

"The coffee is one-fourth pure coffee and three-fourths rye; the ration of the mixture is one-fifth of an ounce. The ration of milk is two ounces at breakfast and two ounces at supper. The ration of hominy, of mush, and of oatmeal is two ounces. The ration of beef and mutton is twelve ounces of the raw meat, which will make about half that amount when cooked and freed from the bone, &c."

The arrangement for religious exercises will be understood from the following extract from the last report. "Religious services have been regularly held throughout the year on Thursday of each week and on the first Sunday of each month by the Rev. Edward Cowley; on the second and fifth Sunday, by the Rev. Father Gelinas; and on the remaining Sundays, by the Rev. Zetus Searle with the assistance of clerical and lay brethren from the city."

The management of the institution is by the Board of Commissioners of public charities and correction, consisting of four members.* Dr. Parsons has three assistants, besides whom there is a clerk and an apothecary.

* Outside the asylum I heard this Board most unfavourably spoken of; and since my return I noticed that the Rev. Dr. Beecher has been denouncing in the strongest terms the flagrant misrule, the peculation, the jobbery, and the prostitution of justice by the civic rulers of New York generally.

THE NEW YORK STATE LUNATIC ASYLUM.

The site of this asylum is an elevated plain about a mile from the beautiful town of Utica, on the north bank of the Mohawk river. It commands fine views of the surrounding country, especially northward, of the Mohawk valley and, in the distance, the range of hills which divides the waters flowing into lake Ontario from the tributaries of the Hudson. The grounds in front are well wooded, and the trees do not interfere with the prospect to be obtained from the institution. The asylum itself has a very imposing appearance on approaching it from the lodge, due to its situation, its extended front—a vast block four storeys in height, with a central building a storey higher, in front of which is a portico, colonnade and flight of steps, and above, a dome—as well as the solidity and, at the same time, somewhat venerable aspect of the mountain limestone of which it is built.

In general plan it does not differ materially from some of the insane hospitals already described, for instance, the Michigan one, except that at Utica the receding wings are joined by a cross building at the distance of about a hundred yards—it may be somewhat more or less—from the main front. Behind and parallel with this connecting block, at a shorter distance, is the range of workshops.

The interior arrangements of the wards are also similar to the others, except that there are no day-rooms. Dr. Gray, the Physician-Superintendent, who courteously showed me over, said he had done away with them, as he thinks that congregating a number of patients into one room has a tendency to prevent individuality of character from being developed, which he seeks to promote as much as possible. In lieu of day-rooms they have the alcoves and the seats in the halls, besides which no objection is made to their sitting in their bedrooms, should they wish it, provided they do not put them into disorder.

The alcoves are not so cheerful as they might be, especially in the lower flats; but it is intended to convert the existing into bow windows, which will also have an improving architectural effect in relieving the sameness of the aspect of the frontage between the central building and the extremities. Here, also, there are separate dining-rooms for each hall, with food elevators and cupboards at the end of the rooms. The knives and forks are like those in ordinary domestic use. There is no general bath-room. The baths are for the most part of enamelled iron. Two porcelain ones have just been

ordered from England. There is a large proportion of single bedrooms; the dormitories are for from five to twelve patients; the original day-rooms have been turned into dormitories.

The average number of insane inmates resident during last year was 610. The asylum is over-crowded, and it has been found necessary to refuse many patients, both public and private. Two new asylums of large size are in course of erection in the State, one of which at Ovid is nearly ready for being occupied, so that there is an early prospect of the pressure on the Utica establishment being diminished.

Classification.—There are twelve classes of males and as many of females, each having its distinctive character arranged according to the mental condition of the patients, their habits and manners. On the under flat, on the same level as the offices, the more particular cases are located in their respective halls—such cases as require most attention amongst the convalescents, the demented, and the maniacal, this arrangement facilitating frequent inspection by the medical officers. There are no hospital wards. Dr. Gray purposes having a hospital without calling it by that name, as elsewhere he had noticed that a depressing mental effect and an untoward influence on the bodily ailment were not infrequently exerted on sick patients when their maladies were considered so serious as to require removal to the *hospital*.

Treatment.—On an average about forty per cent. are under medical treatment, including only those who are receiving prolonged medication, stimulants, tonics, &c. Persons suffering from chronic melancholia are permitted to do very much what they choose, within the bounds, of course, of their own safety and that of others, for a long time at first—six months or a year, perhaps,—attention being directed principally to the promotion of their nutrition. When their physical state improves, then, and not till then, they are asked to occupy their attention in work, &c. Dr. Gray holds that the appearance of the lips in these cases is a valuable indication of the general condition. There is usually, he says, a purplish line along the margin, just where the mucous membrane merges into the common integument, indicative of sluggishness of the circulation. When nutrition is progressing favourably, this line gradually fades, the lips become redder, the capillary vessels are more clearly defined, and, at the same time, there is returning activity of the cerebral circulation. He pointed out two or three cases of this kind in females, where the condition of the lips, viewed in connec-

tion with the mental state, certainly seemed to support this opinion.

Besides the general grounds for exercise there are large airing-yards for both sexes, the female one being the best appointed. There was, however, a deficiency of seats and especially verandahs, though the benches without backs under the trees were, to a certain extent, protected from the sun by the foliage.

About twenty-five per cent. of the males work on the grounds of the establishment, and a few are employed in the work shops. There are two or three small rooms where the females meet for sewing, but there is no general work-room.

Theatrical entertainments are the favourite means of amusing the patients. Their usefulness was spoken of in the highest terms. The stage in the hall of the institution is just like that of an ordinary theatre.

Restraint.—The strait-waistcoat is sometimes used for violent cases. Where there is a risk of exhaustion by excessive exercise, patients are locked in box beds, the sides and cover of which are made of wooden spars, with wide interstices, to permit of a free circulation of air round the persons of the enclosed. Bed straps are not used; but sometimes patients are fixed to their chairs by (I think it was said) leather belts.

Dr. Gray remarked that, as an experiment, in the beginning of this year, he gave instructions that mechanical restraint in all forms should be abolished, but that he found it necessary to return to its use, as he was satisfied that some patients suffering from acute mania would otherwise have died from sheer exhaustion, due to the constant maintenance of the erect posture and their unceasing exertions.

In this connection, I may mention that in many of the halls the chairs are fixed to the floor in such a way that a person sitting in one can make it rest on its two fore legs, or on the front and back one on either side, but not on the hind legs alone. The object of this is to preserve the walls from being destroyed through the American practice of lolling backwards with the legs hanging, or the heels resting on some support in front, such as another chair.

Causes.—Not many cases resident have been produced by sunstroke. A considerable number are the result of self-abuse, which in the experience of the physicians is not half so common in females as in males. Dr. Gray spoke of several

cases of exalted religious fervour associated with, and he considered due to, this vile habit, which had been lately or were still under his care. In several women insanity was ascribed to procured abortion. I shall quote a few striking details on this point from Dr. Gray's annual report:—"One woman told me, and the statement was verified by her husband, that seven successful abortions were procured on her by one of her female friends—and both of these women were highly respectable persons and members of the church. When in broken health and after failure in the eighth attempt she applied to a physician, he informed her of the criminality of the act, its dire consequences to health, and advised her against the continuance of such a practice. She subsequently, however, obtained the services of a charlatan, who succeeded in inducing abortion; and, some months later, this woman was admitted into the asylum in wretched health and suffering from melancholia, which her pastor, ignorant of her true history, attributed to religious excitement.

"A minister recently informed me that, in his congregation in a country village, one of the principal women approached his wife with a proposition that she should destroy her prospective offspring, declaring that she thought it right to do so, and mentioned others who resorted to the practice, rather than be troubled with children."

Much quietude, order, and contentment, prevailed throughout the various wards. Little excitement was manifest among the acute cases; they were also clean in their persons, and, with a few exceptions, tidy in their dress.

The bare cost of maintenance of each patient, exclusive of the proportion for repairs and salaries, is four dollars (12s. current exchange) per week.

Attendants.—The proportion of attendants to patients is one to nine males, and one to six females. There are, also, three supervisors on each flat, who, in addition to the general charge of their departments, get the medicines from the dispensary thrice daily, in little earthenware dishes (on each of which the patient's name is marked on the inside, near the top, instead of on the outside, as in most of the other institutions visited), and give it to those for whom it is ordered with their own hands. Besides the different grades of attendants there is a matron.

Ventilation, &c.—Great attention has been given to the ventilation and heating of the establishment. Dr. Gray explained very fully the system in operation, and walked with me alongside of the main air ducts in the basement. These passages

were formed a few years since at great expense, as they were constructed long after the erection of the asylum. At first, it was stated, they had not been very successful, as the distribution of the air was irregular, producing unpleasant currents at various points. An English engineer, who was a patient, had, on his recovery, suggested that they should make a free, continuous opening along the ridge of the roof of the entire institution, which was done, and since then all their difficulties have been surmounted. The capacity of the entire exit openings is about twice greater than that of the sum of the main air channels along which the air is forced by the fan, and in this arrangement, it is held, lies, for the most part, the secret of success. To a certain extent, however, it was considered to depend on the level of the admission openings. In the first instance the fresh air, whether heated or not, was admitted below; but it was found that upward currents were very distinctly perceptible. Afterwards it was introduced above, and since that change its distribution has been far more equable. When the working of the system was tested after its completion, they found that they could so thoroughly displace the cold air that the temperature was actually six degrees higher *below* than at the ceiling. The observations were then prolonged over a number of weeks, and had been made with great care. A number of thermometers were fixed at regular intervals between the floor and the ceiling, on poles, which were placed in various wards, and the record of the temperature in each was noted at fixed times.

The ventilation was tested in my presence in one of the halls, by means of the anemometer, as well as by the hand, and the deviation of a handkerchief. A distinct outgoing current existed at the floor opening, and a strong inward one was observable above.

During the year, on an average, 150 cubic feet per minute, night and day, are forced in for each person, assuming 700 as the average population. Irrespective of heating, the cost of coal for the fans is about a penny a day for each inmate. The air is heated by passing over steam coils.

A very marked improvement has been observed in the sanitary condition of the institution, since the introduction of the existing mode of heating and ventilation, as the inmates have enjoyed an almost complete immunity from erysipelas, typhus and typhoid fever, and kindred diseases, which were previously, owing, it is believed, to the crowded state of the asylum, of not infrequent occurrence. And it had even told on the

aspect of the attendants, the ruddy cheek having taken the place of the blanched hospital one; besides which there has been a freshness in the clothing worn by them, which was not noticeable previously.

It was stated that this system of ventilation and heating is so much approved that it has been introduced into several other institutions, and also into the buildings of the Capitol in Washington.

Dismissal of Chronic Cases.—From forty to sixty cases are annually returned to their friends when the Medical Superintendent considers that they are not dangerous, in order to provide room for new patients. No one can be removed without his sanction. Though it was said that nothing unpleasant had come to the knowledge of the officials with respect to these discharged lunatics, it would be too much to infer that their condition is therefore satisfactory, as it does not appear that there is any regular inspection or inquiry made regarding them at their homes. A considerable number are also transferred to the county poor-houses every year, and the character of their treatment there will be understood from the remarks in the note which I shall add to the description of this asylum.

Note.—The accommodation for the insane poor in the State of New York has hitherto been exceedingly defective, as the asylum at Utica cannot accommodate a third part of the entire number. Those who cannot be admitted into that institution, besides the chronic cases dismissed from it, are, for the most part, in the county poor-houses. From time to time their disgraceful treatment in these establishments attracted public attention, and four years ago the late Dr. Willard was appointed to collect information regarding the state of the insane collected in them, and to report to the Speaker of the Assembly. This gentleman's report was published in 1865, and, after some delay, orders were given for the erection of two large asylums, to which the cases in the poor-houses should be transferred. One of these, near Ovid, is for a thousand cases, and, as already mentioned, at the time of my visit was nearly finished.

I am indebted to the attention of a medical friend for a copy of the report, and assuredly many of the details recorded in its pages are quite harrowing. In fact they could scarcely be credited, were it not that the authority on which the statements are made is unquestionable. No doubt it will occur to many, and it must be admitted, that the revelations in the

Lancet about three years since regarding the state of a number of the workhouse hospitals in this country, especially in the metropolis, were highly discreditable ; but bad though they were, in their case the evils exposed, affected, with but few exceptions, persons of sound mind, who, to a certain extent, could protect themselves, instead of the helpless insane ; and besides, the worst of the conditions have been far excelled in neglect and cruelty by most of those so earnestly, and, it is pleasing to add, successfully, attacked by Dr. Willard.

However, reference to this painful subject might have been omitted altogether, seeing that the evils complained of are about to be remedied, had it not been that I was assured by several medical gentlemen connected with asylums in different parts of the country that the condition of the insane in the poor-houses of many other States of the Union is in no degree better than what it has hitherto been in New York State ; and I cannot help thinking that the more widely this fact is known the greater the likelihood of public feeling being aroused in these districts, in the cause of justice and humanity to their unfortunate brethren.

On this account, then, I make the following quotations, which, it is right to state, are, perhaps, the most striking, from a host of details of a similar nature in the report, merely premising that it will be evident that Dr. Willard's standard of excellence in asylums was not too high when he says, regarding the New York pauper one, "The City and County of New York, among their great public charities, maintain a large and well-conducted asylum for the insane on Blackwell's Island."

The quotations, let it be clearly understood, have reference only to the insane in these establishments :—

ALBANY COUNTY POOR-HOUSE.—"The asylum was built to accommodate thirty-one lunatics. There are in confinement at the present time in this space, designed only for *thirty one, one hundred and three*. Dr. J. L. Boulwane, the alms-house physician, had reported, 'We are now compelled to crowd from three to five of these creatures, who are in the greatest state of helplessness and dependence, in one room, also obliged to use some of the small, damp, air-tight cells, which are below ground, as lodging-rooms, whose aerial capacity was never more than barely sufficient to sustain the health of one individual.'"

BROOME COUNTY POOR-HOUSE.—“Whipping is seldom resorted to.”

COLUMBIA COUNTY POOR-HOUSE.—The great majority are noted as filthy. “Twelve sleep on straw without bedsteads. The straw is changed once or twice a week. None had stockings during the winter.”

CORTLAND COUNTY.—“The sexes are not kept entirely separated, and male attendants are employed to care for female insane.”

DELAWARE COUNTY.—The report, after describing the wretched cells, goes on to say, “The sufferings of these unfortunates, from whom the air and light of heaven are shut out, would form a dark chapter of human misery, could it be written.”

MADISON COUNTY.—“Fifteen out of twenty-five in the poor-house are filthy in their habits. The only care they receive is from the hands of incompetent paupers. Those confined in the cells are extremely filthy, most of them not using vessels, and their excrements are mixed with the straw on which they lie. Eighteen sleep on straw without bed or bedding. Their straw is changed only once in a week; and these lunatics, with their ‘bodies besmeared with their own excrements, not allowed to come daily to the open air, eating in the same filthy apartments, are not washed from one year’s end to another.’ The cells in which they are confined are only four by six feet, with a ceiling of seven feet, and open into a hall, so that they can have no ventilation. ‘A bad stench’ issues from them, and in this stench the lunatics are forced to live. *Three males were in a state of nudity;* the females wore only chemise, but the mild cases are clothed like other paupers. Fourteen had neither shoes nor stockings during the winter.”

NIAGARA COUNTY.—“The whip is sometimes, though rarely, used to enforce discipline.”

ST. LAWRENCE COUNTY.—“Though no restraint is used by handcuffs, *whipping* is resorted to, and the violent are put in cages to subdue them. There are no arrangements for cleanliness, ventilation, or uniformity of heat in winter. The sexes are not separated, but mingle promiscuously, and the attendants are from the family of paupers, who are grossly unfit to administer to them.”

SARATOGA COUNTY.—“This house is old, and badly dilapidated. The rooms are low, sadly out of repair, and the air in

the sleeping-rooms most foul and noisome. Corporal punishment is administered to men, women, and children." (The latter remark apparently refers to sane paupers as well as lunatics.)

SCHENERTADY COUNTY.—"Twenty-five are lunatics. There is no accommodation for the various grades of the insane. The sexes are not separated, except at night."

TIOGA COUNTY.—Twenty-one lunatics are resident. The sexes are not entirely separated. Male attendants are employed to take care of the female insane, and they only paupers; pauper attendants for all the lunatics. The rooms are filthy, and the air in them bad. Five have neither shoes nor stockings during the winter. The building is designed to accommodate only eight. It has now in it twenty-one. They are seldom or never visited by a physician."

ULSTER COUNTY.—"The sexes are kept separate, but male attendants are employed to care for the female insane, and they are pauper inmates of the institution. In 1857 the committee appointed to visit charitable institutions, &c., reported of this place as follows:—'Of the inmates, fifteen are lunatics—three males and twelve females. Ten are confined in cells, and one restrained with chains. Besides the main building, there are several small old buildings on the premises, in one of which—a very poor one—were twelve cells for lunatics, very open, and where it is barely possible to keep them from perishing.' The investigation of 1864 fails to show any considerable improvement in the case of the insane paupers in Ulster County."

GREENE COUNTY.—The information obtained had been very defective. "The report of the committee on charitable institutions in 1857 was as follows:—'Six are confined in cells, five of them are in chains, including two women. They are restrained by confinements, and by wearing chains about their legs and arms. Some are chained to the wall. While visiting the house, the committee observed two men and one woman taken from their cells to the yard for air. There they were all chained to the fence, within a few feet of each other. Those confined in cells are without air, except from a small hole in the door. They are in a wretched state. None are cured or improved, a result certainly to be expected from their present treatment.' It is to be hoped that the condition of the institution, and the care bestowed upon the unfortunate lunatics, has improved since 1857."

I shall conclude these extracts by quoting the following remarks of Dr. Willard's. "In some of these buildings the insane are kept in cages, in cells, dark and prison-like, as if they were convicts, instead of the life-weary, deprived of reason. They are, in numerous instances, left to sleep on straw, like animals, without other bedding; and there are scores, who endure the piercing cold and frost of winter, without either shoes or stockings being provided for them. They are pauper lunatics, and shut out from the charity of the world, where they could at least beg shoes. Insane, in a narrow cell, perhaps without clothing, sleeping on straw or in a bunk, receiving air, and light, and warmth only through a diamond hole through a rough, prison-like door, bereft of sympathy and of social life, except it be with a fellow lunatic, without a cheering influence, or a bright hope of the future! Can any picture be more dismal? and yet it is not over-drawn."

These evils suggest the want of, at least, a *temporary* General Lunacy Board in the United States—a Board composed of some of the leading superintendents of asylums, who would bring prominently under the notice of the authorities, in different parts of the country, the condition of the insane for whom they are responsible, and would urge the provision of sufficient asylum accommodation, or, in the event of this radical measure being postponed, would instruct regarding the arrangements and alterations required in the existing establishments for the humane treatment and comfort of the insane inmates; for there can be little doubt that we must ascribe the continuance of the defects referred to, in a country distinguished for the number and character of its philanthropic institutions, in a great degree, to ignorance, on the part of the public generally, of their very existence. But we fear that there is little likelihood of the creation of a *general* board. It would, we apprehend, be regarded as opposed to the spirit of the constitution of the United States, by which each state regulates its interior arrangements, independently of the central government. Local action must, therefore, be relied on; and the greater responsibility consequently rests on individuals in the districts concerned, to bestir themselves in a patriotic spirit, as well as in the interests of our common humanity, to assist in wiping off this blot on the nation's fair name.

On Medico-Legal Uncertainties. By J. W. EASTWOOD, M.D.,
Edin.

(Read at the Annual Meeting of the Northern Branch of the British Medical Association, held at Darlington, July 1st, 1868.)

To wander over the whole field of medico-legal uncertainties would lead us amongst railway injuries, criminal cases of every kind, disputed wills, and various subjects, psychological and non-psychological. Such a wide scope is not the object of this paper, but I wish to place before you some facts of an important department, which I trust will, sooner or later, be brought seriously before the profession and the legislature.

The uncertainties to which I wish to draw your attention are produced by several causes, conveniently divided into medical and legal.

1. Medical difficulties, inherent in the subject itself, from the nature of the human mind; and those arising from the variety of medical evidence.

2. Legal difficulties, caused by the state of the law, and the uncertainties of its administration.

In a court of law it is entirely overlooked, that in trials of psychological interest, it is the human mind, with all its complex workings, that has to be considered, and that no subject is more difficult to comprehend. There is no accurate definition of insanity, either medical or legal; and there is no standard of sanity, except that which a man makes for himself. The *mens sana in corpore sano* exists only in words, as an ideal standard, for who has ever successfully defined "a sound mind?" The difficulties arising from this source can never be removed, but those arising from the variety of medical evidence, as generally given, may be almost entirely removed by a different plan of procedure in our courts of law. It is not borne in mind that there is a large class of persons, especially amongst our criminal population, who are on the border land between mental soundness and unsoundness, whose moral instincts are very feeble, whether owing to nature or education.

It is not therefore to be expected that differences of opinion can be done away with, but they may be brought

within much narrower limits. Lawyers often make severe comments upon the medical evidence, and even the judges and the press use very strong language, whilst the uncertainties caused by the state of the law itself, and the practice of different judges, have received very little attention beyond our own profession.

The facts which I am desirous of placing before you, are connected with the four following departments of medico-legal practice :—

- I. The legal capability of making a will.
- II. The proof of a person's soundness of mind, and fitness for managing his own affairs.
- III. The question of insanity in criminal cases.
- IV. The admissibility of an insane person's evidence in a court of law.

I.—A person can legally make a will, who understands the nature of his property, and proper disposition of it ; but the existence of a delusion is sufficient to render it invalid, even if it have no connection with the subject of the will. Lord Brougham defined a delusion to be, “the belief in things as realities which exist only in the imagination of the patient;” and the case by which he illustrates this is certainly worth recording. “Suppose one,” he says, “who believed himself the Emperor of Germany, and on all other subjects was apparently of sound mind, did any act requiring mind, memory, and understanding—suppose he made his will, and either did not sign it, or before signing was required, or, if he did, signed it with his own name ; but suppose we were quite convinced, that had any one spoken of the Germanic diet, or proceeded to abuse the German Emperor, the testator's delusion would at once break forth, then we must at once pronounce the will void, be it as efficacious and as rational in every respect as any disposition of property could be ; of course no one could propound such a will with any hopes of probate, if it happened that, while making it, the delusion had broken out, even although the instrument bore no marks of its existence at the time of its concoction.” Now this language is in marked contrast to some observations which Lord Brougham made in a number of the *Jurist*, on “Partial Insanity,” arising out of a case where probate to a will was refused. He maintains strongly the “unity and indivisibility” of the mind, and rejects the idea of partial in-

sanity. His arguments would not profit us much, even if we understood them; but they were those of a lawyer and a philosopher in his closet, and not of an observant psychologist. "We cannot, therefore," he concludes, "in any correctness of language, speak of *general* or *partial* insanity; but we may, most accurately, speak of the mind exerting itself in consciousness without cloud or imperfection, but being morbid when it fancies; and so its owner may have a diseased imagination, or the imagination may be impaired, and the owner may be said to have lost his memory."

The learned lord admits that a man's mind may be sound on some subjects, not on others, as where he instances a single delusion—that of being Emperor of Germany. This is very much like partial insanity, and it is not necessary to be a devoted follower of Gall and Spurzheim to see the fallacy of the conclusions thus drawn.

To come to more recent instances we shall find no essential difference in the addresses to the juries. The late Sir Cresswell Cresswell, at the Court of Probate, informed the jury that the testator "would not be incapable of making a will, if he was able to understand the nature of the property he was disposing of, to bear in mind his relatives, and the persons connected with him, and to make an election of the parties he wished to benefit. It was not enough, on the one hand, that he should be able to say 'yes,' or 'no' to a simple question; nor, on the other hand, was it necessary that he should be a well-informed man or a scholar. He might be stupid, dull, or ignorant; but if he understood the nature of his property, and could select the objects of his bounty, that would be sufficient." The same judge observed, on another occasion, "that a person who was mad on half-a-dozen points might have sufficient capacity to know his property, and to prove an intention as to who should have it after him. His will would not stand good, because his mind was unsound. So, if in this case the man had any insane delusion upon his mind, and acted upon the influence of an insane delusion, that mind was unsound, and they could not maintain a will that was made by a person under those circumstances."

These remarks are of great practical importance to medical men, who are called upon to give their opinions respecting the state of mind of their patients, at the time of making their wills.

II.—The proof of a person's soundness of mind, and fitness for managing his own affairs.

He who is incapable of making a will, legally speaking, may be quite capable of taking care of himself, and of managing his own affairs. On this subject, however, the uncertainty is not caused by legal definitions of what does, or does not, constitute unsoundness of mind, but by the procedure of our courts, in which the evidence is often so conflicting. Owing, probably, to the fact that the judges who try these cases are the masters in lunacy, who, in course of practice, attain to a considerable knowledge of morbid mental states, the addresses made to juries are more consistent with medical opinions than in criminal and other trials. In one case, where an old lady was the subject of an inquiry of this kind, the evidence was extremely contradictory, and the jury was much puzzled. After all the evidence had been heard the jury retired, and the master had a quiet interview with the lady in their presence. The result was that the jury, twenty-three in number, came to a unanimous verdict that the lady was of unsound mind. The trial had lasted six days, at a serious cost, which might have been in a great measure saved. The case which I have now to bring before you well illustrates the uncertainty of these proceedings, and the necessity for some change.

In July, 1866, Mr. C. M., a successful tradesman, became my patient, for the second time, consequent upon an outbreak of maniacal violence, caused immediately by intemperance. He was in a dirty, miserable condition when I saw him, incoherent in his language, and very bitterly opposed to his only son, a medical man. His form of insanity I regarded as incoherent mania, and there was loss of memory, with delusions, most of which were variable. One of the fixed ones was that his son had burnt his will before his face, the minute particulars of which he related to me and others many times. Although the excitement produced by the drink soon passed away, yet his mental condition remained much the same. Some of his friends having made application to the Commissioners in Lunacy, I was twice requested by them to make a report as to his mental condition. Two medical men having made a different report from mine, the Commissioners requested the Visiting Magistrates and their medical adviser, Dr. Humble, to pay a special visit to Mr. M. to see if he were fit to be discharged. They declined to discharge him, and the son of the patient then applied for an inquiry into the

state of his father's mind. In the meantime two of the Commissioners in Lunacy saw him afterwards, at their ordinary visit, and considered him insane, though they declined to interfere officially owing to the proceedings undertaken. The application for an inquiry was not granted until after the second visit of Dr. Hood, the Chancery visitor. The usual notice was then served upon the patient, and though he declined a jury, his friends obtained one. The trial took place in May, 1867, at Gateshead, before Samuel Warren, Esq., Master in Lunacy, and a special jury of eighteen.

The case excited considerable interest in the neighbourhood, and the medical evidence was conflicting. In support of the patient's unsoundness of mind were Mr. S. H. L. Murray and Mr. John Hawthorn, who signed the certificates, Drs. Charlton and Humble, physicians to the Newcastle-on-Tyne Infirmary, and myself. Against the insanity, the late Dr. White, also physician to the Infirmary, Sir John Fife, Dr. Alexander, and Mr. C. Larkin. The alleged lunatic had delusions that his son had burnt his will, which document was produced in court—that a fellow patient had been killed by an attendant, which was without foundation in truth, and sundry other minor delusions. It was remarkable that of the four medical men brought by the friends of the patient, all of them listened to his delusions, considered him sane, left the house, and never inquired whether the statements were true or false. They came and believed all they heard. Many insane patients may be found who in such a manner could be pronounced sane. After a long trial, and an able summing up on the part of the master in favour of the alleged lunatic's unsoundness of mind, the jury decided that Mr. M. was of sound mind, capable of taking care of himself, and managing his own affairs. This verdict was received with much surprise by the court. Mr. M., no longer a patient, was at liberty to do as he liked. He returned to his old habits, had again attacks of maniacal violence, from which he had been long free, and in less than four months he died with delirious symptoms.

III.—The question of insanity in criminal cases.

Persons are held responsible for their actions if they know right from wrong, even when labouring under delusions.

On no one point connected with this subject are judges better agreed than upon the theory of what constitutes responsibility in criminal cases. So long since as 1812, when Bellingham was tried for shooting the Right Hon. Spencer

Perceval, in the House of Commons, Sir Vicary Gibbs, for the prosecution, said, "upon the authority of the first sages of this country, and upon the authority of the established law in all times, which law has never been questioned, that although a man might be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess a mind capable of distinguishing right from wrong." So able a lawyer as Lord Mansfield, who tried this case, repeated the same views. "The simple question," he said, in his charge to the jury, "whether, when he committed the offence charged upon him, he had sufficient understanding to distinguish good from evil, right from wrong; and that murder was a crime, not only against the law of God, but against the law of the country."

This state of the law continues still to exist, but it is satisfactory to observe that so harsh a theory of the lawyers is not always carried out in practice, or many a poor lunatic would hang by the neck, as was frequently the case some years ago. At the trial of Dove, at Leeds, in 1856, Mr. Baron Bramwell laid down the same law in these barbarous words, that if a prisoner "was under the delusion that the deceased had inflicted some injury upon him, and murdered her whilst under that delusion, *he would none the less be amenable to punishment.*"

Persons may become criminal lunatics in the following ways:—

1. When in custody for some crime, the prisoner may be brought to trial, and declared unfit to plead from "unsoundness of mind," whether he was insane or not at the time of his supposed commission of the crime.

2. He may be brought to trial, and the plea of insanity set up, evidence being heard on both sides, and he may be declared of unsound mind, and consequently not responsible.

3. He may be found guilty, with or without any enquiry into the state of his mind, and may become insane before execution, or whilst undergoing the sentence of punishment.

In these several ways, therefore, *before* the trial, *at* the trial, and *after* the trial, the mental soundness of the prisoner may be enquired into. The process in each case varies greatly, and I shall be able to show that the theory and the practice of the law are quite as uncertain as the theory and practice of medicine.

Numerous instances occur to illustrate the first form of proceeding, as when the prisoner is manifestly unfit to plead from well-recognised insanity, or when he is actually a lunatic, medically and legally, at the time of the commission of the offence. In such cases it becomes almost a mere form to consign the *patient* rather than *prisoner* to an asylum, there to await Her Majesty's pleasure. But with some prisoners it is not thus easy to come to a safe conclusion. One case to illustrate this I shall mention, because it is a striking instance in point, and it came under my own observation.

Cuthbert R. Carr, aged 18, was charged with the murder of Sarah Melvin, aged 7, at Carr's Hill, near Gateshead, on the 13th of April, 1866. The trial took place before Mr. Justice Lush, at Durham, on the 10th of December, 1866. For a long time it was not known who was the perpetrator of the crimes of rape and murder on the little girl mentioned, for though suspicion pointed to young Carr, yet it was not sufficient to warrant his apprehension. After two months he gave himself up at Gateshead, and in the month of June, I saw him on two occasions at the prison there. Three or four medical men also saw him besides, and I never heard of any one who was able to discover any unsoundness of mind in the prisoner. From the report I then made, I copy a few statements on three important points:—

a. "The existence of delusions. Unless the whole confession of the murder be a delusion, there is no belief or statement the prisoner has made to me that can be considered a delusion."

b. "He has now, and says he had at the time of the act, *a full knowledge of right and wrong*, the great legal test of insanity in such cases."

c. "At the time of the murder he had *the power of self-control*—that is, he could have refrained from committing the deed, had he liked to do so."

Although it was evident that this young man belonged to that large class of persons with ill-regulated minds and passions, from which our criminals are derived, yet I could only come to the conclusion that he was responsible for his actions.

When brought to trial he persisted in pleading guilty, and no persuasion could make him change his mind. The judge asked if he was in a condition to plead, and the counsel for

the defence said he thought not, but that there were two medical men who could give evidence as to the state of his mind. They were of opinion that the prisoner was of unsound mind, and there was no one to oppose them. They gave no facts to the jury, such as the existence of delusions, on which they based their opinion, but it was decided that the prisoner was not fit to plead. The whole proceedings occupied a very short time, much to the astonishment of many persons in court. It was not stated that the prisoner did not understand the consequences, but did not *appreciate* them. When I saw him he perfectly understood and appreciated his position, and though some months had elapsed, and time had been given for a considerable mental change to have taken place, yet I could not learn from his solicitor that there had been any change of importance. The result of the verdict was, that the judge directed the prisoner be kept in strict custody until Her Majesty's pleasure be known. According to the law, should this young man ever be of sound mind, he must be brought to trial for the crime he committed, but this will never take place, for he will simply remain a criminal lunatic for life, and possibly, though not probably, he is innocent of the crime.

At the same assizes two days before, Henry Brownless, aged 55, was charged with the murder of a child named Reed, at Houghton-le-Spring, Durham, on the 18th of October, 1866. The plea of insanity was set up, but unsuccessful, although the prisoner was so far of unsound mind that the judge addressed him in these words:—" You are of such a temperament that when you had a small quantity of spirit it threw you into a state of great excitement." The man was sentenced to death, and the judge refused an application to consider his sanity, notwithstanding some apparently stronger evidence than existed in the other prisoner brought before him. The circumstances of this murder were not more atrocious than those of the other, and in both cases a child was the victim. The prisoner fired a barrel of gunpowder for the purpose of killing his daughter-in-law, but a child was killed instead. The sentence of death was passed upon him, and the judge afterwards refused to listen to the plea of insanity. Subsequently, however, such representations were made that the sentence upon Brownless was commuted to penal servitude for life, on the ground of insanity. He was removed to Millbank Penitentiary, and then to Portland, where he remains. I may ask why Carr is in a lunatic asy-

lum, and Brownless in a prison? If the latter was insane, why was he not also sent to an asylum, and treated as a patient instead of a prisoner? The uncertainty of the law is the only answer to these questions.

In the second class of cases there is a full and open trial—that is, witnesses are examined on both sides, and it is here where we see so much divergence of opinion amongst medical men. Many instances of this kind occur, but in the one I am about to mention the verdict of the jury was that the prisoner was of sound mind. A youth aged 16, Henry Gabbites, murdered his fellow-apprentice at Sheffield, without adequate cause or provocation. He was tried at the Leeds Assizes, before Mr. Justice Lush, on the 18th December, 1866. Considerable evidence was brought forward to show that the prisoner was of defective intellect, and the usual want of unanimity appeared amongst the medical witnesses. A verdict of guilty was given with a recommendation to mercy on account of the youth of the prisoner. There seemed to be as much reason for this boy's acquittal on the ground of insanity, as in the case of Carr, many of the circumstances being similar. The Judge, who so easily gave way to the medical evidence at Durham, where there was not a full trial, was at Leeds very severe upon the doctors. The legal test of responsibility—a knowledge of right from wrong, was proved in this instance. His lordship observed that "medical men had theories which did not square with the law, by which a judge and jury must be guided; and he cautioned the jury not to admit excuses for a ferocious act of murder, which depended only on scientific hypothesis, and to be very slow indeed to draw a conclusion, that the prisoner was in that state of mind which prevented his knowing what he was doing." Certainly in the other case mentioned, both judge and jury were very ready, instead of being very slow, to listen to excuses for a ferocious act of rape and murder, and also to the theories of medical men, the whole proceedings being ended in about ten minutes! The sentence of death was passed upon young Gabbites, who "maintained to the end an impassive and stolid bearing, betraying not the least emotion." The full penalty of the law was very properly commuted into imprisonment for life, not as a lunatic, but as an ordinary criminal. On the whole, it seems that full justice was done in this instance, and whilst the law was vindicated, humanity was satisfied.

Under the third head many examples are occurring. It often happens that a prisoner becomes insane whilst under-

going his sentence of imprisonment, when he is removed from prison to a criminal lunatic asylum, and is there treated as a patient instead of a prisoner.

The best instance of uncertainty in this class of cases, occurred in the remarkable career of George Victor Townley, who murdered a young lady in Derbyshire, on the 21st of August, 1863. Before the trial Dr. Hitchman, an experienced psychologist, visited him in prison, and found no symptoms of insanity in Townley. At the trial Dr. Forbes Winslow gave evidence to the contrary, yet the prisoner was found guilty and sentenced to death. After the trial Messrs. Campbell, Forster, and Wilkes, Commissioners in Lunacy, visited him, and reported him of unsound mind. Two local medical men and three justices of the peace visited Townley, considered him insane, and he was removed to Bethlehem Hospital. The now patient was then visited by a government commission, consisting of Drs. Bucknill, Hood, Helps, and Myers, who found him of sound mind, and he was then removed to Pentonville Prison as a prisoner, the sentence of death being commuted into penal servitude for life. His suicidal end is well known, and the fact was interpreted according to the opinions of those who held the unfortunate man to be sane or insane. It is very certain that whatever view we take, the extraordinary uncertainty of this man's career would have been avoided by a proper and thorough examination before the trial; and we may remark the anomaly that after a judge and jury had condemned the prisoner, it should be in the power of two medical men and three justices to send him to a lunatic asylum, without any further mental change having taken place. It was hoped that this remarkable trial would have caused some alteration in the law, but though a profound effect was produced at the time, it has entirely passed off, until some more flagrant instance startles men so much as to compel serious attention to be paid to the subject.

In looking over addresses to juries during a long series of years, by Lords Mansfield, Brougham, Denman, Campbell, Mr. Baron Bramwell, and many others, I find great differences of opinion amongst them. They are generally agreed that the existence of delusion is the great legal test necessary to prove insanity, yet there are some who differ from this view. In March, 1849, at a trial for murder, Lord Denman addressed the jury in these words:—"They all knew that doctors were in the habit of making theories, but the jury were to say

whether those theories were right, and whether there was any proof that the prisoner was under the influence of such morbid affection as to render him irresponsible for his acts. Now he did not find that any delusion had been shown. To say a man who was irresponsible, without positive proof of any act to show that he was labouring under some delusion, seemed to him to be a presumption of knowledge which none but the great Creator himself could possess." In July, 1850, Lord Campbell stated distinctly at a trial that "there might be mania without delusion," meaning thereby insanity without delusion. And though we have seen how indignantly Lord Denman rejected the evidence for insanity without proof of delusion, yet in another case Mr. Justice Maule allowed it, and in Carr's case at Durham, Mr. Justice Lush required neither delusion nor any other tangible evidence of insanity. Instances frequently come under the notice of those accustomed to treat mental diseases, of unsoundness of mind without delusion.

It is satisfactory to notice that there is a tendency in the practice of our courts *not* to carry out the theories of the lawyers, and the literal direction of the statute law. It is thus recognised that at least considerable latitude must be given. In one of the most recent decisions, *Regina v. Shaw*, where a point was reserved as to the meaning of "a person of unsound mind," it was held that it was not necessary to prove the existence of a delusion, but that mental weakness, incapacity for business, and the inability to take care of himself, were sufficient. The Commissioners in Lunacy continually act upon this in their examination of the certificates sent to them.

IV. The admissibility of an insane person's evidence in a court of law.

Persons are capable of giving evidence in a court of law, if they know what they are saying, and understand the nature of an oath, even when labouring under delusions. At a trial where Lord Campbell presided, a lunatic from an asylum was brought to give evidence, when the learned lord said:—"The proper test must always be, does the lunatic understand what he is saying, and does he understand the obligation of an oath?" He thought such was the case, and Barons Alderson and Platt agreed, whilst Mr. Justice Coleridge in agreeing also, further stated:—"there was a disease of the mind of the witness, operating upon particular subjects, of which the transaction of which he came to speak was not one. He was

perfectly sane upon all other things than the particular subject of his delusion." This must be partial insanity, but Lord Brougham says there is no such thing. We thus see that a man who is prevented from disposing of his own property, even in a perfectly rational manner, is considered worthy of credit as witness against the life of another person.

I trust I have brought forward sufficient evidence to show how difficult it is to carry out the theories and definitions of lawyers, as well as how uncertain is the practice of the law in those cases, where soundness of mind is called in question. When so many eminent men in two learned professions differ from each other to such a great extent, there must be something wrong in the state of the law, and in the procedure of the courts. There is need of great reform on many subjects, but at least much might be done by the appointment of a well-selected commission of physicians, in all cases where there is a prospect of dispute, to decide certain questions, and thus to avoid those unseemly contests which so often bring our profession into disrepute, and really cause injustice to individuals. That the fault is not always ours, I think I have made sufficiently clear to you. Even if the medical witnesses on both sides were to meet together in an amicable spirit, and consider the evidence, much difference of opinion might be removed. No agreement among ourselves will, however, entirely remedy the existing state of things, without a change of law, and I hope to see such a change brought about by the means which are now being attempted. The new department of state medicine has grown rapidly, and it is proposed that a Royal Commission shall be issued to enquire into a great many subjects of much interest to our profession, and in which its members have been most earnest and persevering. The initiative has been taken by a joint committee of the Social Science and British Medical Associations, and their efforts have been already successful in bringing the subject before the government. I shall be satisfied if I have shown you how much need there is of considerable reform in the present state of legal medicine.

Aphasia or Loss of Speech in Cerebral Disease. By FREDERIC BATEMAN, M.D., M.R.C.P., Physician to the Norfolk and Norwich Hospital.

(Continued from *Journal of Mental Science* for Jan., April, and Oct., 1868, and Jan., 1869.)

Having in my last paper noticed the different forms in which loss or lesion of the Faculty of Articulate Language is met with by the clinical observer, I now propose to consider the various causes which give rise to this morbid symptom.

The study of the etiology of any disease affords one of the best clues to a clear knowledge of its nature and probable course; and as the pathology of aphasia is involved in so much obscurity, it seems especially desirable carefully to review the various circumstances, physical and moral, under which defects in the power of speech have become developed.

Causes.—A variety of morbid conditions may produce lesion of the faculty of speech.

1°.—It may be congenital as in the deaf and dumb, and it is one of the frequent symptoms of idiocy; the case of G. van A. which I have quoted from Van der Kolk is a good illustration of this latter condition. The subject of the loquular defects in idiots is treated in a masterly manner by Dr. Wilbur, Superintendent of the New York State Asylum for Idiots, to whose interesting treatise I would refer for more complete information on this point.*

M. de Font-Réaulx has published the history of a deaf mute, who died at Bicêtre at the age of 60, and at whose autopsy, there was found a remarkable atrophy of the island of Reil on both sides, especially on the left; the brain itself, however, was very large with its convolutions particularly well developed, the entire encephalon weighing 1,620 grammes (57 ounces).† This observation is of extreme interest as contrasting with the microcephalic brains to which I shall allude hereafter.

The study of the muteness of the deaf is a subject well worthy of the careful investigation of those members of our profession who have the medical charge of institutions for the deaf and dumb, for it is now recognised that this infirmity is partly remediable; in fact, a noted French writer upon this subject says “il est possible de donner la parole à la plus grande partie des sourds-muets, car c'est le plus petit

* On Aphasia, New York, 1867.

† Localisation de la faculté spéciale du Langage Articulé, p. 99.

nombre, c'est l'exception qui présente des vices primordiaux ou acquis de l'appareil vocal."* In reference to this subject Dr. Gairdner has observed that the aphasic, supposing the disease congenital, could not possibly be educated, but must remain almost an idiot—the mind of an infant enclosed in the shell of a man; he further remarks that in certain forms of cretinism, or of congenital idiocy, the primary defect may have been aphasia and thus the development of the mental faculties an impossibility.†

It has been said that intemperance in one or both parents, about the time of conception, may cause insanity in their offspring; if this be so, it is not unlikely that any morbid cerebral condition of the parents at the period of conception may give rise to aphasia in their children. A case confirmatory of this view has fallen under my own observation, the subject of it being a remarkably fine handsome boy, five years of age, but in whom the faculty of speech could not be roused into action, although he had been submitted to long and special training. Having noticed that he had a well formed head, that there was no hereditary predisposition to cerebral disease, and that his brothers and sister were by no means backward children, I was induced to push my inquiries very closely in reference to the question of cause; and I then elicited from the father that about ten months previous to the birth of this child, he had been thrown from his horse upon his forehead, that he was stunned by the fall, and that he felt confused in the head for some weeks afterwards. Without wishing to draw any positive conclusion from this case, it seems to me that I am not exceeding the bounds of legitimate inference, in connecting the shock to the nervous system of the father with the congenital defect in the son.

2°.—It may occur as a consequence of direct injury to the brain; of this cause several instances have been given in the preceding pages (Lesur, Castagnon, Romberg, Bergmann, Kolk, H. Jackson). Traumatic cases may be regarded as veritable vivisections, and their study is invaluable in an etiological point of view, as contributing perhaps more than any other class of cases to sound ideas as to the question of the cerebral localisation of our divers faculties. Dr. Popham of Cork has quoted the following curious case of traumatic

* *La Surdi-Mutité, par Dr. Blanchet, Chirurgien de l'Institut National des Sourds-Muets, tom. ii., p. 12.*

† *On the Function of Articulate Speech, p. 32.*

aphasia, which is not only interesting from its cause, but from the local morbid condition which coincided with recovery. A boy, aged 15, received a kick from a cow, between the nose and the forehead, which stunned him, but left apparently at the time, no other injury than a few scratches and slight epistaxis, so that he walked after it some miles to a fair. On the fourth day he was seized whilst at work with vertigo and loss of speech, his hearing, taste, and sight, as well as deglutition, remaining unaffected. A variety of remedies, amongst others mesmerism, were tried but without any benefit. He continued for twelve months as servant to a medical man, although totally mute, when he got extensive inflammation of the anterior part of the scalp followed by suppuration, and regained his speech as suddenly as he had lost it eighteen or nineteen months before.*

The annals of military surgery are rich in instances of traumatic aphasia the result of gunshot wounds of the head, but the impairment of language is only mentioned as it were *en passant*; now, however, that the attention of the profession is being called to the localisation of the cerebral faculties, it is to be hoped that a more detailed account of the psychological phenomena attendant on gunshot wounds of the head will in future be given, and that "*Surgery Militant*" will thus make its vast resources more available for the settlement of complex and obscure questions in cerebral pathology.

3°.—Aphasia has frequently been observed as a symptom of tumours in different parts of the encephalon; of sanguineous deposits in the brain and of softening of that organ; of exostosis or of malformation of the bones of the cranium; in fact, of organic lesions of various kinds affecting the cerebral substance, especially the anterior lobes. Instances of loss or impairment of speech dependent upon each of these causes have been mentioned in the previous part of this essay.

It would seem that disease in the neighbourhood of the anterior lobes, but sufficiently near to exercise indirect pressure upon them, may give rise to aphasia. Dr. A. Voisin has recorded a case where it was caused by the pressure exercised on the left anterior lobe by a considerable haemorrhagic clot in the temporo-sphenoidal lobe on the same side.† Dr. Odmansson, of Stockholm, mentions a case of tubercles in

* Popham op. cit., p. 9.

† Nouveau Dictionnaire de Médecine et de Chirurgie Pratique, Article Aphasie.

the brain, in which aphasia was a symptom during life; after death there was found haemorrhage into the left insula.*

4°.—It may occur as a remote symptom of endo-pericarditis, where fibrinous vegetations detached from the cardiac valves have been carried into the cerebral arteries (usually the middle cerebral)† and have thus caused embolism; thus establishing a relationship between cardiac disease, obliteration of the middle cerebral artery, softening of the brain from loss of nutrition, and aphasia. As illustrating the above sequence of symptoms, I would refer to the history of William Lemon among my own observations, and to the cases of M. Peter and Dr. Scoresby Jackson, also mentioned in the preceding pages.

The coincidence of cardiac disease with aphasia is most common; it will be remembered that of the thirty-four cases recorded by Dr. Hughlings Jackson in the London Hospital Reports, the heart was more or less affected in twenty instances. Dr. Cesare Lombroso, of Pavia, in commenting upon the cases of Dr. Jackson, denies the construction usually placed on the coincidence of aphasia and disease of the heart and large arteries; according to him, the disease in the nervous centres would be the *cause* rather than the *consequence* of the affection of the heart and arteries, the disease in these last depending upon perverted organic nutrition, the result of faulty innervation. Dr. Lombroso further remarks that although there may be cases in which cardiac hypertrophy may determine disorders of the nervous centres, yet, as a rule, these lesions in the circulating organs are secondary and not primary.‡ Although the high scientific position of the distinguished Italian Professor naturally claims for any statement of his the greatest possible respect, I apprehend that his views of the sequence of heart and head affections will not be unreservedly adopted by English pathologists.

5°.—It has been observed as a symptom of disease of the spinal cord, (Maty, Abercrombie, &c.); Velpeau, in the Revue Médicale for 1826, has recorded a case of left hemiplegia with

* Dublin Quarterly Journal, Nov. 1868. Translated from the Hygiea, by Dr. W. D. Moore. This is a short review of the aphasic question by a Swedish physician, together with some original cases of great interest; the author, however, seems but imperfectly acquainted with the contributions of British authors.

† We may assume that these vegetations are more likely to pass up the *left* carotid.

‡ Studi Clinici sulle Malattie Mentali, p. 9.

aphasia where after death he found in the centre of the right column of the spinal cord, and in the middle of the cervical portion, a cavity three inches long and two or three lines in diameter, full of soft matter like pus; in the left column of the same portion of the cord, there was a similar disease but to a less extent; the brain was healthy.*

6°.—It may ensue as a nervous symptom; many persons under the influence of anger, joy, or excitement of any kind, are seized with a temporary incapacity to speak. Dr. Todd, under the head of emotional paralysis, mentions the case of a man between fifty and sixty years of age, of an irritable temperament and hypochondriacal habits, who, in a very animated conversation, became excited to such a degree, that his power of speech completely abandoned him; there was no paralysis and the mental faculties were unaffected; he continued speechless, however, for about a week, and in a short time the power of speech fully returned.† Mr. Dunn mentions an instance of aphasia occurring during the latter months of pregnancy, after a sudden and painful shock.‡

Dr. Panthel, of Limburg, has furnished the following curious illustration of the effect of nervous excitement upon the power of speech.

A peasant boy twelve years of age, previously in good health was very much affected at the grave of his father, whom he had unexpectedly lost. During the interment he threw himself down, and was carried home unconscious. The fainting lasted about a quarter of an hour, when he awoke in the undisturbed possession of all his faculties, sensory and motor, except that he was unable to produce any sound. Dr. Panthel having been summoned, noticed that the intellect was unaffected, that he suffered no pain or uneasiness, as indicated by the motion of the head, but that he had lost his speech and voice, and could utter no sound whatever. He could move the tongue and lips in all possible directions, and the functions of deglutition and respiration were unaffected. On being questioned and urged to speak, he seemed confused, and by a shake of the head expressed his inability. If he attempted to speak, violent spasms were produced in the muscles of the larynx, governed by the hypoglossal nerve—the sterno-thyroid, hyo-thyroid and sterno-hyoid. On Dr. Panthel's compressing these parts with the hand, the cramp immediately ceased, and in answer to the question whether he could speak, he instantly replied, with cheerful countenance: “Yes, speech is my greatest delight!” When the

* Abercrombie. *Diseases of the Brain*, p. 357.

† Clinical Lectures on Diseases of the Brain, p. 278.

‡ Medical Psychology, p. 77.

pressure was removed, the inability to speak recurred; the power of utterance being instantly restored by again applying the hand to the supra-laryngeal region. This singular condition lasted three days, when he was again in undisturbed possession of speech. A fortnight afterwards, being in a field, a brace of partridges suddenly flew past him, when the speech defect above described returned for two days. A week later, in consequence of some strong mental emotion, another relapse ensued, which lasted only a few hours. After this no fresh attack occurred, and the lad continued perfectly healthy.*

Instances of suspension of the power of utterance from great mental emotion, are of daily occurrence, and the great writers of antiquity who seem to have been such close observers of nature, have not failed to shew their knowledge of the psychological results of any sudden and unexpected shock upon the nervous system. Everybody is familiar with the lines of Virgil in which he makes Eneas describe the psychical effect produced upon him by the appearance of the ghost of Creusa:—

“*Obstupui, steteruntque comæ; vox faucibus hæsit.*”

7°.—The epileptic condition seems to be a frequent cause of aphasia. Leborgne, Broca's patient was an epileptic, as were also the subjects of several of the cases I have recorded, and the term *epileptic aphemia* has been applied to them. M. Delasiauve has recorded the case of an epileptic woman, in whom aphasia alternated with epilepsy—thus, she would be aphasic for a week, when on the occurrence of a fit of epilepsy, the power of speech would return, paralysis of the bladder, however, ensuing; by and by, she would again lose her speech and the same sequence of symptoms would ensue.

A curious instance of the coincidence of aphasia with epilepsy is recorded by Dr. Odmansson, where the epilepsy occurred after a blow on the vertex; the aphasia was transient, but frequent; on every occasion that several attacks occurred soon after one another, the power of speech suffered in a greater or less degree, and was gradually completely lost. When the attacks ceased or became less frequent, the power of expression soon returned; at the same time, both intellectual disturbances and occasionally also paralytic phenomena, set in and disappeared, but the aphasia always preceded them and was the last to cease.†

* Deutsche Klinik. Jahrgang, 1855. S. 451.

† Odmansson op cit., p. 493.

8°.—It would seem that aphasia is not an uncommon accompaniment of neuralgia and hysteria. At the meeting of the Société Médicale des Hôpitaux, at Paris, April 12, 1867, three cases of loss of speech were mentioned as a symptom or accompaniment of facial neuralgia. The subject of one of them (that mentioned by M. Guyot), was a lady aged 34, who for fourteen years had suffered from facial neuralgia, and who was suddenly seized with aphasia which lasted half an hour and then ceased; the loss of speech recurred under similar circumstances, when both it and the neuralgia were removed by sulphate of quinine. At a subsequent meeting of the same society, aphasia was spoken of as a frequent accompaniment of hysteria.

Dr. Graves has quoted a case observed by Dr. Richter, of Wiesbaden, of an hysterical female who regularly became speechless every day at four o'clock, p.m.; consciousness did not appear to be at all impaired, but there was a feeling of weight about the root of the tongue, and the paroxysm went off with a large evacuation of watery urine, accompanied by perspiration and sleep. This periodical aphasia was cured by large doses of quinine.* Another most striking instance of the connexion between loss of speech and hysteria is recorded by Dr. Wells, the subject of it being a woman aged forty-three, who had been subject to fits of an hysterical character for a long time; on recovery from one of these she found herself entirely deprived of the power of speaking, or even of making any noise whatsoever with her voice, though she was at the same time in full possession of every other faculty, both mental and bodily; strange to say her recovery of speech coincided with the occurrence of the next hysterical fit, which took place ten days later.*

"There is," says Dr. Bergmann, "a fixity of thought, as well as a flight of thought, an intellectual catalepsy and chorea." The same may be said of the process by which these thoughts are communicated to the outer world, for it would seem that loss of speech may occur as a cataleptic symptom. Some years since, I attended the widow of an eminent physician, who would sit for hours together with the head forcibly extended on the cervical spine, and who whilst in this position never spoke a word. The intellectual powers of this lady were unimpaired.

* Dublin Journal of Medical Science, Jan., 1834, p. 419.

† Medical Communications, vol. 2, p. 501. London, 1790.

9°.—Reflex action. Dr. Brown-Séquard in his course of lectures delivered before the New York Academy of Medicine expressed the opinion that aphasia was a reflex phenomenon. Sauvages, under the name of *Mutitas Verminosa*, mentions the case of a child in whom loss of speech was due to the presence of worms; anthelmintics having been administered, thirty-six *lumbrici* were expelled, when speech was restored with the exception of a difficulty in pronouncing the letter B.*

Hoffmann also mentions a similar case where the cerebral irritation from reflex action was more permanent and accompanied by opisthotonus. The occurrence of the aphasia was sudden, but although the administration of anthelmintics soon resulted in the expulsion of fifteen worms, it was only after an appropriate treatment of many weeks that the power of speech began to improve.† The same author says elsewhere that he has frequently seen and cured cases of loss of speech from the presence of worms.

Dr. Gibson, of Hull, has also recorded a case of aphasia with complete paralysis of the extremities, caused by *Trichocephalus dispar*, and cured in twelve days by appropriate treatment.‡

10°.—Several instances are on record in which loss of speech supervened on atmospheric changes, or on application of cold or heat to the head. In the case I have quoted from Dr. Jackson, of Pennsylvania, the aphasia occurred after a check to the cutaneous perspiration from exposure to the night air; Dr. Banks records an instance of aphasia and deafness occurring after fatigue on a *very cold day*; and Abercrombie mention a case of a young man who bathed twice in the river Tweed, and who after coming out the second time lay down on the bank and fell asleep without his hat, exposed to the intense heat of the sun. On awaking he was *speechless*, but walked home, and seemed to be otherwise in good health.§

Ten years ago an invalid soldier came under my own observation, who five months previously, whilst at Corfu, had a *sunstroke* which caused left hemiplegia and *loss of speech for a week*. This case is of some interest, not only from the paralysis being on the *left side*, but also from my having made

* *Nosologia Methodica*, Tom. i., p. 779.

† *Hoffmanni Opera*, Tom. iii., cap. vii., obs. iii.

‡ *Lancet*, Aug. 9, 1862.

§ Abercrombie, op. cit., p. 155.

a note of it long before I could have had any preconceived ideas about modern localisation theories.

11°.—Certain drugs, especially those obtained from the Natural Order Solanacæ, would seem in some instances to suspend the power of speech. Sauvages, under the head of *Mutitas a narcoticis*, says that certain robbers which infested the neighbourhood of Montpellier, in order the more successfully to exercise their profession, were in the habit of drugging wine with the seeds of the Datura Stramonium, the effect of which was, that those who drank it could not speak for one or two days, although wide awake. He also states that he has observed the same effect from the berries of the Atropa Belladonna and from the roots of Hyoscyamus Niger. This shrewd observer has not omitted to speak of that want of control over speech produced by alcohol "*idem accidit cum temulentia in a vini abusu balbuties orta quotidie observatur.*"*

Dr. Paget Blake, of Torquay, has published a case of poisoning by Stramonium ($1\frac{1}{2}$ drachm of the tincture), in which the patient on recovering his speech—which he had at first entirely lost—misnamed almost everything he wanted, although he was evidently quite unaware that he did so; several days elapsed ere he could mention his wants without calling something by a wrong name.† It will be observed that the aphasia, which was *atactic* at first, before passing off assumed the *amnesic* form.

Dr. John Ogle has recorded a case, in which opium given in small doses always caused the patient to be talkative, "to talk foolishly," as she called things by their wrong names; the peculiarity passed off when the effects of the drug ceased. There was no symptom whatever of any cerebral disease, and Dr. Ogle presumes that the effect of the opium was the result of some peculiar modification of the cellular or vascular action within the brain.‡

12°.—Septicæmia. Blood poisoning—whether from uræmia as in Bright's disease, or from alcoholism, gout, plumbism, or syphilis—is another frequent cause, illustrations having been furnished by Andral, Jaccoud, Heymann, and Auguste Voisin. The case of Anna Maria Moore reported by myself, may be

* *Nosologia Methodica*, Tom. i., p. 177.

† St. George's Hospital Reports, 1868, p. 159, where minute details of this interesting case are given.

‡ *Lancet*, Aug. 22, 1868.

considered as due to blood poisoning, for a diseased action which is set down as the result of the climacteric change, may be due to the retention in the system of certain morbid and effete matters—some irritating compound in the blood—which ought to be eliminated by the kidneys, and thus a septicaemic condition is produced.

Hoffmann mentions the case of a girl of eighteen, who, on exposure to cold during a journey at the period of menstruation, was seized with symptoms of cerebral congestion, and was dumb for four days, the mind and senses remaining unaffected; after an evacuant and diaphoretic treatment she entirely recovered.†

The suspension more or less complete of the power of speech which sometimes occurs after continued fever, is probably due to a vitiated condition of the blood circulating through the brain. It occurs more frequently after enteric than typhus fever; Dr. S. Jackson, however, mentions three cases in which typhus coincided with impaired speech;‡ Dr. Osborne has recorded three instances of gastro-enteric fever, in which loss of speech occurred without disturbance of the intellect; and Troussseau mentions three cases, one observed by himself, and two by M. Boucher, of Dijon, in which aphasia occurred during *convalescence* from fever (dóthinen-terie); in two of these cases there was albumen in the urine.§ In a case recorded by M. Augier, the aphasic symptoms seem to have been due to a cerebro-meningeal hyperæmia, caused by the excessive use of cider in a person who in early youth had been a great brandy drinker.§

In the category of causes we are now considering must be classed the poison introduced into the system by the bite of venomous snakes. M. Ruftz stated at a meeting of the Paris Anthropological Society, that he had seen a certain number of persons who had completely lost their speech in consequence of a bite from a serpent (*Fer de lance*); sometimes aphasia was produced instantly, and at other times, some hours only after the bite; but, what was most remarkable, those who survived the poisoning remained permanently aphasic. Van der Kolk quotes the case of a gunner in the Dutch Indies, who was bitten by a serpent called by the natives, Oeloer; in a few minutes he became giddy and lost

* Op. citato, Tom. iii., cap. vii., obs. i.

† "Edinburgh Medical Journal," Jan., 1847.

‡ Clinique Médicale, Tom. iii., p. 618.

§ Gazette des Hôpitaux, March 8, 1866

the power of swallowing; there was total loss of speech, but consciousness was unimpaired; death occurred four hours and a half after receipt of the injury.*

I have dwelt thus upon blood poisoning as a cause of impairment of speech, because it seems to me to have an important bearing on the question of localisation of the faculty of articulate language; for since in our days *humourism* has given way to *solidism*, there is a tendency to connect all abnormal cerebral symptoms with change of tissue, whereas temporary loss of speech, at all events, does not necessarily require for its production positive lesion of brain substance, any more than jaundice from obstruction and reabsorption of bile, need in all cases imply structural disease of the liver.

Diagnosis.—Having in this essay employed the word aphasia in its widest and most general sense, as applicable to loss of speech from whatsoever cause, the existence of this defect is so easy of recognition, that but little need be said under the head of diagnosis; although as regards the various forms which this defect assumes, and the pathological conditions which give rise to them, the *differential diagnosis* becomes important.

I need scarcely observe that aphasia must not be confounded with aphonia, where the voice is only suppressed, but the faculty of speech remains. Although it has been stated that this distinction was not observed by the older authors, still, from a careful study of their works, it will be seen that in many instances the confusion was only apparent, and depended on the use of a faulty nomenclature; for it is evident that the authors themselves were fully aware of the wide difference between these two morbid conditions.†

In the form of paralysis recently described by Trousseau, under the name of *Labio-glosso-laryngeal Paralysis*, there is no impairment of the faculty of speech; it is simply a mechanical defect dependant on paralysis of the tongue, lips, and of the muscles of the larynx. Aphasia may be apparent only, instances having occurred in the Essex Hall Idiot Asylum, where children who for many years had passed for deaf and dumb, unexpectedly gave evidence of the possession of the

* Dr. W. D. Moore's Translation p. 162.

† Hoffmann uses the word *a honia* in the description of his cases, as does also Dr. Carmichael Smith, in his extremely interesting paper in the Medical Communications for 1790; but it will be seen from a perusal of their clinical histories that the authors intended to describe instances of inability to articulate.

power of speech. One boy, supposed to be a deaf-mute, was heard one night to sing a chant which had been used at public worship, pronouncing the words distinctly, and giving the tune correctly. Another boy, also passing for a deaf-mute, broke into a violent passion in consequence of something on his slate being rubbed out, and demanded of another lad why he had done it.

In an obscure subject like this we cannot afford to dispense with any of the auxiliary aids to differential diagnosis. With the view, therefore, of determining whether loss of speech depended in any particular case on softening, or whether it was the result of mechanical pressure exercised by a clot or by some morbid growth, it has occurred to me to make a volumetric analysis of the urine, upon the assumption that in cases of softening there would be more disintegration of nervous tissue, and consequently an excess of phosphorus removed from the system.*

On referring to those among my own cases where a quantitative analysis of the urine was made, it will be observed that the results were negative, inasmuch as there was no deviation from the ordinary range, except in one instance—that of the patient Sainty, when the amount of chlorides was 10 parts per 1,000, the ordinary range being, according to Beale, from 4 to 8 parts per 1000.

Although my own experiments in reference to the urine cannot be considered as in any way conclusive—being based on too small a number of cases—I cannot but think, however, that a quantitative as well as a qualitative analysis of the urine is imperatively called for in all cases of obscure cerebral disease; and since the introduction of the volumetric system, this analysis has become much easier of accomplishment, and ought never to be omitted where the least doubt exists as to exact diagnosis. “How many cases,” says Todd, “formerly supposed to be anomalous, are now readily understood by reference to uræmic poisoning through inefficient kidneys.†

The sphygmograph may render essential service in afford-

* I am by no means prepared to say that this assumption is absolutely correct, but whether it be so or not, inquiries in this direction cannot be otherwise than useful.

† Dr. Todd further remarks that there are many other points of interest in connexion with the state of the urine in brain disease, which can only be settled by many observers, such as the variations of the phosphates, the quantity of the sulphates and the chlorides, and whether, in the marked increase or decrease of these salts or elements of the urinary secretion, we can derive any trustworthy aid to determine the inflammatory or non-inflammatory nature of the brain lesion.—*Clinical Lectures on Diseases of the Brain*, p. 311.

ing a clue to the probable condition of the arteries of the brain, and thus enable us to form an opinion as to whether aphasic symptoms are due to structural or merely functional disease. Dr. Sansom has kindly communicated to me the particulars of a case of aphasia, in which Dr. Anstie, on applying the sphygmograph, noticed a decrease of arterial tone, and that there was a decided difference between the two sides.*

Thermometric observation may be of assistance in the clinical recognition of the morbid lesion giving rise to the aphasic symptoms. The result of Professor Broca's observations on aphasic patients has been to show *an elevation of temperature above the left ear*, in those who are the subjects of cerebral softening. According to the distinguished Parisian Professor, the increase is sometimes two or three degrees centigrade, and in that case it can be appreciated by the hand; when the rise in the temperature is less, the variation can only be recognised by the aid of the thermometer. M. Broca thinks that when aphasia is the result of *progressive atrophy of the third frontal convolution*, there is probably a decrease, instead of a rise of temperature, but this fact he has not yet verified.†

Prognosis.—Some authorities have considered sudden loss of speech as necessarily indicative of grave cerebral disorder. Dr. Winslow says it is most unusual for sudden speechlessness to exist without being immediately followed by acute cerebral symptoms. Dr. Copland seems to share the same opinion, for in his work on Palsy and Apoplexy, he says that "loss of the power of articulation, except in hysterical cases, is either attendant on, or followed by, the most complete or fatal states of palsy or apoplexy." Troussseau also considers the aphasia which is accompanied by hemiplegia, of the most serious import, and alludes to its frequent termination by *apoplexie foudroyante*, giving three instances in which this fatal result ensued.‡

* It is to be hoped that Dr. Sansom will be induced to publish this most interesting case *in extenso*.

† M. Broca's method of taking the temperature in these cases is as follows:—He takes two perfectly similar thermometers, covers them with little bags of wadding, and then applies them on each side of the head, fixing them by means of a circular band. It is essential that the two little bags should be of the same thickness, weight, and form. At the end of ten minutes he reads off the position of the mercury, and marks the difference.

‡ Clinique Médicale, Tom. ii., p. 625.

A glance at the observations which I have recorded in the preceding pages, will shew that loss of speech, although often of ominous and serious portent, is not unfrequently perfectly amenable to treatment, the function being sometimes completely restored in a very short time. The Prognosis, however, must necessarily depend on the cause which has given rise to the symptom; when it occurs as a sequel of continued fever, when it occurs as a neurosis, or is of hysterical origin, or when it arises from any moral cause, a recovery may be anticipated. The chances of the complete restoration of the faculty are also much greater when the aphasia is simple and uncomplicated with any paralytic symptom. When hemiplegia coexists with aphasia, the return of motor power usually coincides with a corresponding improvement in speech; this, however, is not always the case, as for instance in the observation of Sir Thomas Watson, to which I have already alluded, where, although the paralysis disappeared, there was no corresponding amelioration in the power of articulation.*

Treatment.—Having admitted that aphasia is only a symptom, and not a disease of itself, its treatment must obviously depend upon the cause which produces it. Still some practical good may result from a brief consideration of the mode of treatment applicable to the various forms of loss or lesion of speech which are observed in practice; and at the same time the pathology of this obscure symptom may perhaps receive some elucidation from a brief analysis of the therapeutical measures; which have been more or less successfully adopted in the numerous cases which have now been submitted to the profession.

In those cases that are associated with hemiplegia, and where there is structural disease to account for it, there can be no special treatment for the aphasic complication; but in those instances where loss of speech is the sole or principal symptom, medical science may do something toward removing the morbid condition.

In those cases which seem to depend on the circulation of some morbid product through the brain, whether from faulty

* In reference to the persistence of amnesic aphasia after the disappearance of all other morbid cerebral symptoms, Van Swieten has the following passage:—“Vidi plures, qui ab apoplexia curati omnibus functionibus cerebri recte valebant nisi quod decesset hoc unicum, quod non possent vera rebus designandis vocabula invenire; manibus, pedibus, totius corporis uixu conabantur explicare miseri, quid vellent, nec poterant tamen. Malum illud per plures annos sæpe insanabile perstat.”—*Van Swieten Commentaria in Boerhaave*, Tom iii., § 1018.

kidneys or sluggishness of other secreting organs, a treatment actively eliminatory will be found beneficial. Long before the attention of the profession was specially called to the lesion of articulate language, a remarkable instance of recovery of the power of speech after free purging, which brought away several fetid, dark-coloured stools, was observed by Dr. Richard Jones.* A French physician, M. Mattei, has seen aphasia the consequence of constipation entirely removed by repeated injections ; after giving minute details of this case, which is full of interest, he says, "*La malade a rempli en une demi-heure trois énormes vases de matières fécales, et lorsqui l'intestin a été tout à fait vidé, la parole est devenue aussi précise que si la femme n'avait rien eu.*"†

As far back as 1790, Dr. J. Carmichael Smith has recorded a case of loss of speech of some months' duration, which yielded to an emetic.‡

Surely the successful treatment of such cases as the above is very significative in reference to the question of localisation, and must be a source of difficulty to those who adhere to the doctrine of a separate and limited centre for speech.

Venesection or abstraction of blood by leeching or cupping may occasionally be useful where the morbid condition is dependent on temporary congestion ; in the case of Professor Rostan, as well as in that I have quoted from Dr. Jackson, of Pennsylvania, speech was rapidly restored by the abstraction of a little blood. When we have reason to infer that the brain lesion is of an irritative character, as perhaps indicated by early rigidity of the paralysed muscles, and by their extreme sensibility to the galvanic stimulus, we are justified in expecting some benefit from the abstraction of blood ; where an opposite condition exists bleeding will probably be worse than useless.

When loss of speech occurs in hysterical and highly excitable persons, or is an accompaniment of the choreic or epileptic condition and may depend on a spasmodic state of the cerebral arteries, diffusive stimulants and antispasmodics will be found of service. Crichton mentions a case in which large doses of Valerian were effectual, and Dr. Hutchison, of

* Edinburgh Medical Journal, 1809, p. 281

† Gazette des Hôpitaux, June 15, 1865.

‡ Medical Communications, Vol. II., p. 488. London, 1790. The particulars of this case are of extreme interest, as also those of two others described in the same communication.

the United States has recorded a case where hysterical loss of speech was cured by Etherisation.*

There are certain cases in which the aphasia seems to depend on a kind of cerebral catalepsy, and where very powerful stimulants, such as electricity, prove of great value. I have elsewhere stated that in one of my own cases, that of Sutherland, electricity had a decidedly baneful effect; and in this affection, as well as in motor paralysis, this powerful remedial agent must be used with the greatest caution. In reference to its use, we cannot do better than observe the distinction laid down by Dr. Todd—that electricity is injurious when there is an early tendency to muscular rigidity, showing an exalted polarity of nervous tissue, and probably an irritating lesion of the brain; thus, when the aphasia is an accompaniment of muscular paralysis, the result of electricity on the limbs affected may serve to guide us in our diagnosis, by showing whether the lesion is irritative or depressing.†

Strong mental emotion is often salutary in such cases; we are all familiar with the story in Herodotus of the son of Croesus, who had never been known to speak, but who, at the siege of Sardis, being overcome with astonishment and terror at seeing the king—his father—in danger of being killed by a Persian soldier, exclaimed aloud, *ἄνθρωπε μὴ κτέινε Κροῖσον*. Oh, man, do not kill Croesus! This was the first time he had ever articulated, but he retained the faculty of speech from this event as long as he lived.‡ Herodotus is universally admitted to be a trustworthy historian, but if it be thought far-fetched to illustrate a subject by allusion to a work written 500 years before the Christian era, I may add that such cases have been met with by other observers. My friend, Mr. Dunn, has recorded a similar one, and a few months ago, I myself was invited by Mr. Allen, of Norwich, to see with him a man, aged 37, who had been in his usual health up to the day preceding my visit, when, during a meal, his wife noticed that all his limbs were shaking, and from this

* Medical Times, July 29th, 1865.

† In the "Lancet," for January 23rd, 1869, Dr. Marcey has mentioned a most striking instance of the benefit of electricity in a case of hemiplegia with aphasia, where, after recovery from the paralysis, the loss of speech continued. Dr. Marcey, having determined to try galvanism with Smee's battery, one of the electrodes was applied, by means of Mackenzie's galvaniser, to the tongue, and the other to the back of the neck, in contact with the spine. Speech began to return from the very first application of the galvanism, and continued steadily to improve each time it was used.

‡ Herod. Hist. I., 85.

time he became speechless. The suspension of speech was unaccompanied by any symptom of paralysis, and the loss of the faculty of articulate language continued for six days, when being asleep on his couch, he suddenly started up, and was heard to say three times, "*A man in the river!*" From this moment speech was restored, and when I saw him an hour afterwards, he told me that he had dreamed that a man was falling into the river; the mental shock produced by this dream was salutary, for it resuscitated the previously dormant faculty of articulate language.

In our efforts at the restoration of speech, we must not lose sight of the fact that as muscles from want of use lose their contractile power, and become atrophied, so it is possible that the convolution or portion of brain presiding over articulate language—assuming *pro hac vice* that there is such a localised centre—may, from long disuse and actual cessation of function, undergo a change of some kind, by which the patient may be somewhat in the same condition as that of a child who has not yet learned to speak; thus, one of the most interesting features in the treatment of certain cases of aphasia is the education of the organs of the speech, as it were, *de novo*.

Several instances have been recorded confirmatory of this view. M. Piovry relates the history of a merchant who had to re-learn his a b c.* Dr. Bank's case of the gentleman re-learning Greek and Latin is a further illustration, as also the remarkable observations of Dr. Hun, which I have recorded when treating of the American contributions to this subject.† Perhaps the most satisfactory result of efforts to re-learn to speak is that recorded by Dr. Osborne, in connexion with his remarkable case to which I have already alluded under the head of *Varieties*. Dr. Osborne says:—"Having explained to the patient my view of the peculiar nature of his case, and having produced a complete conviction in his mind that the defect lay in his having lost, not the power, but the art of using the vocal organs, I advised him to commence learning to speak like a child, repeating first the letters of the alphabet, and subsequently words after another person. The result has been most satisfactory, and affords the highest encouragement to those who may labour under this peculiar kind of deprivation; there being now very little doubt, if his

* *Gazette des Hopitaux*, May 27, 1865.

† *Vide Journal of Mental Science*, April, 1868.

health is spared, and his perseverance continues, that he will obtain a perfect recovery of speech.”*

However hypothetical, therefore, the re-education of the nervous centres may, at first sight, appear, there exists sufficient evidence to induce us, in all cases where cerebral loss of speech is unattended by any marked lesion of the intelligence, to endeavour gradually to rouse into action the complex apparatus, the concurrence of which is necessary for the re-establishment of man’s noblest prerogative—the faculty of articulate language.

(To be concluded in the next number of this Journal.)

A Case of Syphilitic Insanity. By S. W. D. WILLIAMS, M.D., Assistant Medical Officer, Sussex Lunatic Asylum, Hayward’s Heath. *With a Microscopic Examination of the Brain,* by W. MOXON, M.D., F.R.C.P., Assistant Physician, Lecturer on Pathology and Demonstrator of Morbid Anatomy, Guy’s Hospital.

Although from an early period of medical enquiry syphilis has been known to affect, more or less seriously, the whole system, it is only within the last decade that attempts have been made, chiefly by foreign pathologists, to demonstrate that this fatal virus does not confine its ravages to the coarser structures of the human body; but that the delicate tissue of the nervous system may be alike destroyed, and the mind’s balance unhinged, by its direful effects. MM. le Dr. Leon Gros et E. Lancereaux in a work, *Des Affections Nerveuses Syphilitiques*, published in Paris, in 1861, have with great care collected a mass of observations from different quarters, but have not added much to our knowledge in defining the symptoms which accrue from syphilitic disease of the brain and its membranes. Indeed the confusion and uncertainty which prevail in this path of pathology are so great, and the subject itself is of such paramount importance, that any cases at all authenticated bearing on this point ought surely to be recorded.

I conceive, therefore, that no apology is needed in publishing the following case; for not only is the *post hoc ergo propter hoc* extremely well marked, but of the history there is no

* Dublin Journal of Medical Science, Nov. 1833, p. 169.

doubt, and the patient was under one eye during nearly the whole time the malady ran its course. Moreover, I have had the advantage of the unbiassed opinion of Dr. Moxon as to the syphilitic nature of the disease of the brain. He knew nothing whatever of the case, and never saw the patient in his life. Immediately on the patient's death the brain and spinal cord were removed and forwarded to him for his examination. The result of this examination is detailed below, and cannot fail to be read with much interest. It is conclusive as to the syphilitic nature of the disease, and as will be shown hereafter, corresponds in all important particulars with the accounts published by foreign pathologists.

F.P. Single, Female, æt 27 years. Admitted into the Sussex Lunatic Asylum, Haywards Heath, 2nd June, 1867.

History of Case.—No hereditary taint. Has been a domestic servant. Never married. Never had children. Has led a life of intemperance and dissipation, and for some time past has gained her living as a Brighton common prostitute. She was admitted into the Brighton Workhouse about nine weeks ago, suffering from delirium tremens and syphilis. When the more violent delirium subsided she became depressed and hypochondriacal, refused her food, threatened to destroy herself, and lapsed gradually into extremely dirty habits.

State on Admission. (a.) *Mentally.*—She appears to be suffering from a hypochondriacal melancholy. She is low and depressed, and taciturn. Sits apart from the society of others all her time, brooding over her sins, wishing herself dead, and at intervals exclaiming "Oh, God, I am ready to die, take me and give me a razor to cut my throat with." She takes no thought whatever as to her personal appearance, would not eat unless fed, and is perfectly callous to the calls of nature. Yet her memory appears to be good. If aroused out of her self-egoism she will answer questions with intelligence and can give a collected account of herself and her symptoms.

(b.) *Physically.*—She is very stout and for a person of her stature weighs heavily, but the muscles are soft and flabby and there is a deceptive semblance of health about her pink cheeks. The heart's action is at times irregular—now feeble—now rapid—but there is no distinct bruit. Her lips are blue and tongue white. There is a white discharge from the vagina, and there are well marked evidences of secondary and tertiary syphilis about her body. Thus there are patches

of venereal lichen about the trunk and legs, there are condylomata on the labia, and she owns to having suffered from a chronic sore throat and offensive discharge from the nose for some months.

At times she appeared to suffer severely from pains in the head, especially at the left temple—indeed, occasionally, she almost screamed aloud from the pain, it was of so severe, although transitive, a nature. This head-ache was at times accompanied with vertigo and drumming in the ears and appeared to affect the sense of hearing considerably.* The irides were frequently very contracted, but she would not own to any defect of sight or double vision.

Progress of the Case. 1867, July 4th.—The treatment ordered after admission was that the bowels should be smartly purged to begin with, and an occasional aperient given as required; that she should take a warm bath daily; that her food should be nutritious, but light and digestible, and that stimulants be avoided. Appropriate remedies were also ordered for the local discharge.

July 12th.—In many respects much improved. The eruption is dying away, and the discharge has ceased. She is more cheerful, less confused in her ideas, and does a little odd-work about the house.

August 4th.—Had a fit of an epileptiform character this morning which lasted for eight minutes. She was severely convulsed and quite lost her consciousness. Was very confused for some time afterwards, but towards evening recovered. The eruption has returned:

R: Potass Iodid..... 3ii.

Sp. Ammon Aromat..... 3iv.

Aq. ad. 3xii., mft. Mist:

Sumat 3i ter die.

1868, January 7th.—A great change has gradually come over her since the last entry. Instead of being depressed and hypochondriacal, she has become noisy and restless—extremely spiteful, especially to her fellow-patients, and very mischievous. The eruption has again disappeared. There are no head symptoms and the medicine has been omitted.

She is working in the laundry, but is of little real use.

April 7th.—Has been again complaining greatly of pains in the head and vertigo. Her vision is now undoubtedly

* Dr. Ludwig Meyer, in a paper published in the *Allgem. Zeitschrift für Psychiatrie* entitled *Ueber Constitutionelle Syphilis des Gehirns*, found these symptoms in nearly all the cases of Syphilitoma of the Brain he records.

becoming defective and she gets very deaf—together with these symptoms partial paralysis has lately come on very slowly and almost imperceptibly. It affects chiefly the left side and more especially the arm. Mentally she is becoming more demented, her memory is very bad, her habits extremely filthy, and she sleeps or dozes away most of her time.

To return to the Iodide of Potassium in increased and increasing doses—and to have the most nourishing diet.

June 23rd.—Had a slight paralytic seizure yesterday and was convulsed for a time. The face is drawn awry—the left eye squints—the speech is much affected, and she drags one leg a little. Her appetite remains good and she takes plenty of food.

June 25th.—Has been very sick all to-day, bringing up nearly everything she takes—she still eats with avidity all that is given her.

Omit medicine and confine her to essence of beef-tea and brandy for a time. Administer Hyd. c. Cretæ, gr. iii., three times a day.

July 6th.—No improvement—remains very helpless and debilitated. Is almost quite deaf; can only just see sufficiently to crawl from one chair to another—frequently vomits her food, and is altogether a pitiable object. The administration of the mercury was carried out until her gums were sore.

August 17th.—Was again convulsed for a time to-day, and the paralysis of the right side the face has become much more marked, and her articulation decidedly more indistinct. She now remains in bed entirely.

September 4th.—Becomes slowly worse. The paralysis increases and her mind becomes more lost. She obtained no benefit from the Iodide of Potassium after a certain time, and none at all from the salivation. Her case is, without a shadow of doubt, a hopeless one as far as any remedial agents we are acquainted with, and she is slowly drifting from bad to worse. Under these circumstances it was determined to try and obtain some syphilitic matter with which to inoculate her after the plan so ardently recommended by Dr. Boeck, Professor of Medicine in the University of Norway. In her hopeless condition but little harm could be done and good might arise.

For a time we were disappointed in obtaining any matter, but at last one of the House Surgeons to St. Bartholomew's Hospital sent us some. She was inoculated in four places

on the arm, and the arm became somewhat inflamed but no good pustules were formed. In the mean time, she was gradually sinking and ultimately passed into a state of coma, from which she never recovered, but died on the 5th October, 15 months after admission.

Post-mortem Examination.—Thirty-eight hours after death ; rigor mortis very marked, body emaciated, bed sore on coccyx.

Head.—The calvarium was very irregular in thickness, being in some places so thin as to be almost translucent, and in others unusually thick ; very considerable force was required to separate it from the dura mater, in which three or four small gummy prominences were embedded—all being apparently placed over the convolution of the longitudinal fissure of the right hemisphere. On attempting to remove the brain from the skull, it was found to be impossible to do so, owing to the middle lobe being bound down with the three membranes in one solid mass to the bone. On applying a little force with the finger at this spot, it broke through into a cyst, from which a quantity of thick pus of a slightly green, creamy appearance escaped.

Most of the continental authorities appear to look upon this glueing of the membranes and cortical substance to the bone as almost pathognomonic of syphilitic disease. It is noticed by MM. Gros and Laucereaux in twenty-two out of thirty-one cases recorded by them.

The brain was detached from the bone as cleanly as possible, put in spirit, and sent forthwith to Dr. Moxon, at Guy's Hospital. The following is the result of his examination :—

“In the right hemisphere close to the lower surface at the junction of the middle and posterior lobes of the cerebrum is a cyst of the size of a small plum ; it extends from the lateral ventricle to the surface, being adherent to the dura mater at the surface, but separated from the ventricle by a little softened brain tissue. The cyst has a firm wall, which it is difficult to tear. When torn it parts in circumferential laminæ ; it contains pulpy matter with irregular shreds. The colour of the contents is about that of milk of sulphur. The microscopic examination of these contents shows them to consist of lymphoid corpuscles, with semi-fibrillated inter-cellular material, mostly cloudy and degenerated. The cells and intercellular substance become free in the small patches.

The cyst wall is composed of more or less perfect connective tissue.

"On the under surface of the anterior lobe near the sylvian fissure is a small sulphur coloured patch in the grey matter, which presents the same microscopic appearances.

"In the posterior lobe of the left hemisphere on its outer surface the dura mater is adherent to the grey matter through the membranes for the space of an inch. Under the adhesions the grey matter is broken down. The most characteristically syphilitic disease is found in the left sylvian fissure on the middle lobe opposite the Island of Reil. Here is a patch of the size of a bean in the grey matter coming to the surface. The outer part of this patch is semi-transparent, firm, and fibrous. The centre of the patch is opaque and sulphur coloured, composed of spindle shaped and rounded elements. Deep in the substance of the right corpus striatum is a soft patch, and again in the anterior lobe of the right hemisphere, occupying the grey matter but extending into the white and not quite reaching the surface, is an encysted collection of yellow matter with firm parietes, similar in quality to that found in the lower part of the right hemisphere.

"There is a small patch of softening in the left lobe of the cerebellum on its lower surface."

There was nothing abnormal in any of the thoracic organs or abdominal viscera.

Remarks.—After the perusal of such a case as the above, the question naturally suggests itself to one's mind—What are the symptoms by which, during life, such a condition of the brain as Dr. Moxon has described can be diagnosed? This can only be answered, by comparing the case with any other equally well authenticated cases of the same disease that may have been published—and this, in the few lines that are left to me, I shall attempt to do.

As might be presumed from the seat of the disease, most of the symptoms are to be referred to the head; and of these none seem more frequent than severe neuralgic pain, often coming on suddenly and disappearing in equally as sudden a manner. This pain is always described by the patient as being very deep seated, and is generally referred to the back of the head. Dr. Westphal, of Berlin, Dr. Ludwig Meyer, MM. Gros and Lancereaux, all dilate on this symptom. It is true that in tubercle of the brain much the same sort of

pain is experienced, but as Wagner points out,* tubercle in the brain scarcely ever occurs except in conjunction with tubercle in other parts of the body.

With this Cephalagia we have noises in the ears, vertigo, gradual impairment of the special senses of sight and hearing. In some cases, according to certain authors, a symptomatic fever accompanies the early stages of the disease, and is synchronous with the paroxysms of pain in the head. Such a set of symptoms should always lead to questions as to any syphilitic taint, and if secondary syphilis can be found, the diagnosis of the head symptoms cannot be doubtful. Later on in the progress of the disease, epileptiform or apoplectiform attacks become more or less frequent, and, as may be noticed in the case above described, after each such seizure, an increasing paralysis is evident. Paralysis, indeed, is an almost unvarying accompaniment of this disease, and I am only aware of one recorded case with a fatal termination in which it did not occur.† Indeed, it may be supposed to be a necessary consequence of the syphilitoma of the brain. Coma supervenes on the paralysis, and ushers in the fatal termination.

The mental phenomena accompanying these physical symptoms vary apparently at the commencement of the disease, being sometimes of a maniacal nature, but more frequently melancholic. Thus in the seven cases recorded by Dr. Ludwig Meyer,‡ in five cases there was melancholia, in two mania. Of the three cases recorded by Dr. Leidesdorf, and already referred to, two appeared to have suffered from melancholia; and in the majority of the cases collected by MM. Gros and Lancereaux, this hypochondriacal melancholy was well marked. Upon the supervention of the epileptiform attacks, the intellectual powers begin to decline, and as the paralysis increases, dementia gradually becomes more profound, and ends in almost complete amentia.

In conclusion, it only remains for me to point out that the foregoing post-mortem appearances recorded by Dr. Moxon are allied, in all important particulars, with those observed and recorded both by Lebert and Virchow in cases of syphilitic diseases of the brain that have come under their

* Das Syphilom oder die Constitutionell-syphilitische Neubildung. Von E. Wagner. Archiv der Heilkunde, 1863.

† This case is recorded by Dr. Leidesdorf, in the "Weiner Medizinal-Halle Zeitschrift," for 21st February, 1864.

‡ Op. cit.

observation, and therefore renders the diagnosis of this case all the more sure.

All authorities appear now to be of one accord in their belief that secondary syphilis may give rise, in any organ of the body, to the production of a morbid structure, much allied in some particulars to tubercle, and in others to carcinomatous growths. "This syphiloma, as it has been called, may exist either as a diffuse infiltration through the tissue of the organ, or in the form of a tumour, not distinctly defined, soft, and of homogeneous appearance—usually described in France as a gummy tumour."^{*}

It no doubt proceeds in the first place from the proliferation of the nuclei of the neuroglia in much the same manner as pus, tubercle, and cancer do, and then develops itself in either one of two directions.

1. Either the formation of cells predominates, and then the intercellular substance is soft, jelly-like, mucous or fluid—the mass, either through degeneration, becoming puriform, and finally ulcerating, or remaining jelly-like and coherent.

2. Or the cell formation is limited, and the intercellular substance increases; the cells are spindled-shaped, or have the stellate form of the cells of connective tissue, or the rounded form of granulation cells. Ultimately, fatty degeneration takes place, and dry yellow knots appear in the product.[†]

On referring to Dr. Moxon's account, we find all these appearances in various processes of development. Thus, he says, the outer wall of the cyst in the right hemisphere is composed of more or less perfect tissue; the internal wall is made up of cells with semi-fibrillated intercellular substance, whilst the cyst itself is full of disintegrated, softened matter, in a state of fluid. In the left sylvian fissure and deep in the substance of the right corpus striatum is a patch of syphiloma, semi-transparent, firm and fibrous. This closely resembles apparently the "firm, yellowish albumino-fibroid exudation," described by Dr. Wilks in his paper on Syphilitic Affections of the internal organs, published in the "Guy's Hospital Reports" for 1863.

One further point may be worthy of note as tending to elucidate a moot point in cerebral pathology, which is, that although Dr. Moxon describes an encysted collection of yel-

^{*} Review. "Journal of Mental Science," April, 1864.

[†] Ueber die Natur der Constitutionell syphilitischen affectionen. Von R. Virchow., Archiv. Band, xv.

low matter in the anterior lobe of the right hemisphere, occupying the grey matter extending into the white, and nearly reaching the surface, and which one might fairly think was of so extensive a nature as almost, if not quite, to destroy the functions of that part of the brain, yet there was no aphasia during life. Indeed, the patient could speak distinctly up to the time she became unconscious.

OCCASIONAL NOTES OF THE QUARTER.

Actions for Alleged False Imprisonment in an Asylum.

Two trials which have recently taken place on account of alleged false imprisonment in a lunatic asylum deserve some notice before they pass quite out of mind. In the first trial, that of Johnstone v. Cotham, the plaintiff, who was chaplain of St. Mary's Hospital, brought an action against the defendant, and sued for £5,000 damages, for having been placed by him in a lunatic asylum. It was admitted that Mr. Cotham had acted from purely disinterested motives, for the benefit and protection of, and indeed out of compassion to, the plaintiff, who had formerly been his curate. The evidence of the plaintiff's insanity adduced at the trial included that of Mr. Cotham and his churchwarden, and of the defendant's landlady; the evidence of the two medical men who signed the certificates, and of Dr. Sibson, one of the physicians of St. Mary's Hospital; the evidence of two of the Lunacy Commissioners, and that of Dr. Armstrong, the proprietor of the asylum, and of his medical assistant. Notwithstanding the conclusive character of this testimony, and the feeble character of the little evidence which the plaintiff was able to adduce in favour of his sanity at the time when he was put under restraint, there can be no question that, but for the clear and decisive summing up of the Lord Chief Justice, the sympathies of the jury would have resulted in a verdict for the plaintiff. As it was, however, they were constrained to pronounce for the defendant, but at the same time did not forego the expression of their strong disapproval of the manner in which the plaintiff had been removed to the asylum. He had been

taken there quietly in a cab, at two o'clock one morning, by the defendant, one of his churchwardens, and a policeman in plain clothes. It is to be presumed that the jury would have approved the course of proceeding, had Mr. Johnstone being decoyed in the asylum by some lie, instead of being honestly told where he was going, and being compelled to go. We feel no doubt whatever that the truthful plan adopted was far the best, as it nearly always is in these cases, and that the time of removal may, for the future, be properly left by juries to the judgment and opportunities of those who have placed upon them the painful and heavy responsibility of dealing with a person suffering from acute and dangerous maniacal excitement.

In the second trial, that of Gent v. Glennie and Ray, which took place before Mr. Justice Smith, the plaintiff brought an action against his brother-in-law, who, without any personal motive, and only in compliance with the urgent entreaties of the plaintiff's daughters, had taken the necessary steps for protecting them by placing him under restraint in an asylum. Very strong evidence was given of the plaintiff's dangerous insanity at the time of his being sent to the asylum, and the jury instantly returned a verdict for the defendant.

The cases were, in some degree, similar, inasmuch as an excessive indulgence in stimulants appeared to have been the cause of the insanity in both instances, and recovery took place in a short time after the patient had been placed under proper care and treatment. In these circumstances lay the hope of the actions. No doubt it was thought that a jury might be persuaded to regard the alleged insanity as really nothing more than the excitement produced by drunkenness, and the quick recovery as conclusive evidence of the truth of that view. And if so, it might then be confidently expected that, from the common jealousy of asylums, they would give substantial damages to the aggrieved persons. It is hardly necessary to say here that the effect of drunkenness may be to produce not only delirium tremens, but acute and furious mania, necessitating the treatment of an asylum. The point in which it does seem incumbent to remark seriously is the opinion expressed by the Lord Chief Justice and Mr. Justice Smith with regard to the degree or kind of insanity which may be held to justify sequestration in an asylum. Both these judges are reported in the newspapers to have instructed the jury that the question for their determination was not whether the plaintiff was subject to delusions, but whether he was a

dangerous lunatic—whether at the time he could not, with due regard to his own safety and the safety of others, be allowed to remain at large. “If,” said the Lord Chief Justice, “they were of opinion that the plaintiff was not in a fit state to be at large, then, however they might sympathise with him, their verdict should be for the defendant. If, however, under all the circumstances of the case, they came to the conclusion that the plaintiff was not of unsound mind, *or, being so, was not dangerous to himself or others*, they should find for him. . . . The question for them to consider was whether the plaintiff was, at the time when he was placed in the asylum, a dangerous lunatic.” And in the second trial Mr. Justice Smith is reported to have said: “It was plain that there could be no justification for confining the plaintiff in a lunatic asylum, unless he was, at the time when the order for his reception into the asylum was signed, a person of unsound mind, in such a state of diseased mind as to be deprived of the use of his reason, and to be dangerous to himself or those with whom he might come in contact.” These are startling propositions, and if they contained a just exposition of the law, it would only remain for the Lunacy Commissioners and the county magistrates to order the immediate discharge of at least three-fourths of the lunatics now in asylums. For if the law really be such as these high legal functionaries have stated it to be, we may undertake to say that there is not a single lunatic asylum in the country which is not carried on contrary to law. But we venture to think and pronounce this exposition of the law to be hasty, and, notwithstanding the high authority for it, entirely illegal, and to assert, in opposition to it, that any persons of unsound mind, whether he be dangerous or not, may legally be placed in an asylum on the authority of the order and medical certificates prescribed by the Lunacy Acts. Twenty years ago, the then Lord Chief Baron Pollock gave hasty utterance to a similar *dictum*, which called forth at the time an earnest remonstrance from the late Dr. Conolly, and subsequently a letter from the Commissioners in Lunacy to the Lord Chancellor which was printed by order of the House of Commons. We quote the most important paragraphs in that letter, for they are particularly appropriate now:—

To revert to the opinion stated to have been expressed by the Chief Baron, that no person should be placed or detained in any Lunatic Asylum unless he be dangerous to himself or others: upon

this point it is of vital importance that no mistake or misconception should exist, and that every medical man who may be applied to for advice on the subject of lunacy, and every relative and friend of any lunatic, as well as every magistrate and parish officer (each of whom may be called upon to act in cases of this sort), should know and be well assured that, according to law, any person of unsound mind, whether he be pronounced dangerous or not, may legally and properly be placed in a County Asylum, Lunatic Hospital, or licensed house, on the authority of the preliminary order and certificates prescribed by the Acts 8 and 9 Vict., c. 100, or c. 126 (as the case may be).

The order and certificates thus obtained show that the person mentioned therein is either a lunatic, an idiot, or a person of unsound mind, and a proper person to be confined, and fully justify all parties in the matter, and they enable the proprietor or superintendent of any hospital or licensed house to plead them in defence to any action, and are, in the words of the statute, a justification for "taking, confining, detaining or retaking" the patient (see 8 and 9 Vict., c. 100, s. 99).

If all lunatics and persons of unsound mind, except such as had previously manifested a dangerous tendency, were to be excluded from the care and treatment provided in lunatic establishments, sanctioned by law for the benefit of the whole class, the most lamentable consequences must ensue.

In respect to pauper lunatics, it has already been the subject of almost universal complaint, that the number of such lunatics has been multiplied, and the country burthened to a prodigious amount, because the poorer class of lunatics have been allowed to remain at large, or kept in workhouses, deprived of that medical treatment which a lunatic establishment properly managed is best calculated to afford, until their malady has become incurable.

The misery to lunatics' families, and the great cost to the various parishes and counties consequent on this course, it would be difficult to exaggerate.

In regard to private patients, if not placed for cure or care in some lunatic establishment, they must be kept at home under every disadvantage to themselves, and be the cause of great and unnecessary expense, and of inexpressible annoyance to their families. The first, and an essential proceeding, with a view to cure, is, generally, to detach the patient from the scenes and associations in the midst of which his disorder has arisen. If he were to remain at home, this could not be effected; the proper treatment and accommodation could not be obtained, inasmuch as separate apartments, separate attendants, and daily medical supervision are necessary, and these in ninety-nine cases out of a hundred would be beyond the means of the patient's family to afford. Again, the habits and general conduct of patients under the influence of mental disease are frequently so violent, and at times so offensive, that it would be to the last degree cruel and unjust

to expose the other members of the family to them ; more especially where there are children, whose minds might receive a shock, and perhaps be incurably injured, by continually witnessing the paroxysms or maniacal extravagances of a lunatic.

Dr. Conolly, in his pamphlet entitled, “A Remonstrance with the Lord Chief Baron,” which rapidly went through three editions, set forth with great moderation, and in a most conclusive manner, the mistaken and mischievous nature of the ill-considered *dictum* of the Chief Baron. He says, very justly :—

If the liberty of an insane person is inconsistent with the safety of his property or the property of others; or with his preservation from disgraceful scenes and exposures ; or with the tranquillity of his family, or his neighbours, or society ;—if his sensuality, his disregard of cleanliness and decency, make him offensive in private and public, dishonouring and injuring his children and his name ;—if his excessive eccentricity or extreme feebleness of mind subject him to continual imposition, and to ridicule, abuse, and persecution in the streets, and to frequent accidents at home and abroad ;—his protection and that of society demands that he should be kept in a quiet and secluded residence, guarded by watchful attendants, and not exposed to the public. To consider, as your Lordship seems to do, that a process so expensive, and attended with such publicity, as a Commission of Inquiry, should be a necessary preliminary to taking this proper care of a patient, would in a majority of these cases exclude such care altogether. If a good asylum was not open to the unfortunate man without such a process having been gone through, he would generally be at length condemned to a domestic imprisonment, more secret, and in every respect more objectionable than confinement in a lunatic asylum. In the one case, no eye would superintend him, nor authority guard him from neglect. In the other, his condition and treatment could not be concealed.

There are many other forms of unsound mind which, although for a length of time unattended with actual danger to the lunatic or others, lead to consequences so intolerable, that an asylum must be resorted to for relief from them. Delusions as to rank and consequence, as to property, as to money owing or withheld, as to attachments on the part of persons of high station, or as to suggestions made by voices in the air, or words written in the sky, often prompt actions so absurd, so inconvenient, and entailing such persecution on particular families, that interference is positively required before the individual becomes dangerous ; which also, if he is not interfered with, he is always very likely to become. The danger must not be waited for, or incurred ; it must be prevented.

If the Commissioners, acting according to your Lordship’s advice,

were to liberate all such people, they would, indeed, "let Bedlam loose," bring affliction on a thousand families, and even throw society into confusion.

He concluded his earnest and seasonable remonstrance in the following terms:—

For some time to come, it will occasion great uncertainty and uneasiness in many families, who, after passing through many afflicting scenes before making up their mind to seclude some insane relative, will now probably once more consent to incur the miseries of leaving the lunatic at large, and in their domestic circle. It will expose every feeble-minded person possessed of property to all the rascality of fanatics and swindlers. It will disturb the contentment of numerous persons now happy and secure in asylums, where they enjoy a safe liberty and every comfort. It will make every medical man so apprehensive of being unjustly censured for writing a certificate of insanity, as often to delay its doing until ruinous or fatal consequences have ensued. It will prevent many insane persons from receiving that early treatment, and being subjected to that timely superintendence which can alone arrest insanity in its incipient stages, and prevent the supervention of stages of which the symptoms are more violent, and involve the lunatic and all about him in danger, and are such as make the case hopelessly incurable.

The possibility of such results must excuse the presumption of this remonstrance. It is the duty of those who have large opportunities of weighing the necessity of various kinds of seclusion or restraint applied to the insane, and of estimating the advantages of treatment in lunatic asylums, to step forward in opposition to prejudices, which, although associated with kind and liberal feelings, are full of mischief and danger. In myself doing so, I trust I have not, in any word I have employed, seemed to depart from the respect with which I subscribe myself,

Your Lordship's

Very obedient, humble servant,

J. CONOLLY.

Hanwell, July 7, 1849.

So serious were the possible evil results of the Chief Baron's opinion judicially expressed, that Lord Monteagle brought the matter at the time before the House of Lords, and strongly deprecated such an exposition of the law. We quote the remarks of Lord Brougham in reply, as they are reported in the *Times*, July 24th, 1849.

Lord Brougham observed that this subject was one of great importance, and thanked his noble friend for bringing it thus prominently forward. It was, however, idle for their lordships to say anything

upon it now, as the subject was still *sub judice*, and their lordships might have to decide upon it in their legal capacity. It was clear to him that, if the learned Judge had really stated upon the trial what he was represented to have stated, there must be a motion for a new trial; it could not be avoided. He had no doubt that everything which ought to be done had been done in the administration of justice, and that the account which his noble friend had quoted must be inaccurate. He could not conclude, however, without recommending speculating attorneys to bring no action upon this *dictum*, for, if they did, they certainly would have their own costs to pay.

This brief summary of what occurred nearly twenty years ago, is the best commentary which can be made now on the opinion which the Lord Chief Justice and Mr. Justice Smith are reported to have expressed on the occasion of the recent trials for alleged false imprisonment. If the verdict of the jury in either case had been for the plaintiff, it is difficult to see how a motion for a new trial and the granting of a new trial could have been legitimately avoided. For there certainly does not appear to be any question whatever that the Chief Justice and Mr Justice Smith gave an entirely mistaken and mischievous exposition of the law with regard to the sort of insanity which would justify the friends of an insane person in placing him in a lunatic asylum—an exposition against which it is incumbent on us to protest. The circumstance is not calculated to impart the most exalted opinion of the amount of exact legal knowledge possessed by our highest legal functionaries. Perhaps it is in law as it is in medicine. As there are some physicians, who, out of the great armoury of the pharmacopœia, and in conflict with the variety of diseases with which they have to deal, only make use of two or three prescriptions, which serve them to cure all sorts of maladies; so may it be with judges, who, out of the vast repositories of legal precedents, and the endless series of Acts of Parliament, and acts to amend Acts of Parliament, only make use of a few common principles and prejudices, which serve them to dispose of all sorts of questions that are brought before them for decision. If there be any such judges, certainly the Lord Chief Justice of the Queen's Bench is not one of them. It is the more surprising, therefore, that he should appear to have given the sanction of his powerful intellect and high legal authority to a principle which, plausible as it seems, it needs but a little consideration to prove quite untenable. Perhaps, however, he was mis-reported or inadequately reported. If so, would it not be well to take some opportunity of correcting the misrepresentation?

We may now not inappropriately conclude this note with a story which is strictly true. A few days after the trials of which we have been speaking, when visiting an asylum, a patient, in loud tones, and with violent gesticulations, demanded his instant release. "Voice," he exclaimed, "won't kill." "What do you mean?" was naturally asked. "Mean that I shall make as much noise as I like, and that you've no business to keep me here. Read what Cockburn and Smith say. I'm not a dangerous lunatic; I only use my voice, and I will use my voice as loudly as I like." "Well, but Mr. —, listen, please," we replied; "you must know quite well from what you see of the persons around you, that the opinion of these judges is most unreasonable—indeed, absurd, and could not be acted upon for a moment." "Certainly it is," he said, "the damnedest nonsense ever uttered; they don't know what they are talking about." Having said this, he went on to declare loudly that he would bring an action for damages as soon as ever he obtained his release, and that he would claim fifty pounds for every minute that he had been unjustly detained. When he brings his action, it may be hoped that neither the Chief Justice nor Mr. Justice Smith may try the case, for outrageously insane as he unquestionably is, he is certainly not a dangerous lunatic. He only means, by aid of the peasants of England, to drive a passage through the earth to the South Pole, and to do a few other wonderful things of that sort.

Epileptic Homicide.

The "Saturday Review," we regret to perceive, is still afflicted with the distressing homicidal mania from which it has so long suffered. An acute paroxysm has been recently brought on by the unexpected escape from the gallows of the convict Bisgrove, who was reprieved by the Home Secretary, Mr. Austin Bruce. Bisgrove, it will be remembered, had been sentenced to death, together with a man named Sweet, for murder, and soon after the sentence made a confession of the crime, exculpating Sweet from any knowledge of or part in it. This was bad enough: that he should by his confession have prevented a man from being hanged, who no doubt deserved to be hanged for something, if he did not happen to have been concerned in that crime. But the matter was made intolerable when Bisgrove himself, who had perpetrated the murder, and had gratuitously added to his iniquity by

making the execution of Sweet impossible, was reprieved. Certainly the trial was a severe one for the "Saturday Review." Two victims suddenly spirited away, when the ropes were all but round their necks! It was natural that it should immediately fall into a paroxysm of acute homicidal frenzy, and violently upbraid the Home Secretary; and we fear that similar paroxysms may be looked for periodically, seeing that homicidal mania is a form of insanity from which complete recovery can rarely, if ever, be believed to take place.

It turned out, when the explanation of the Home Secretary was made, that there were good and sufficient reasons for reprieving Bisgrove, and for sending him, as he has been sent, to a lunatic asylum. An illegitimate child, badly cared for, he had been from his youth upwards of weak health and intellect. For several years he had suffered from frequent epileptic fits, in consequence of which, and his inability to take care of himself, he had been discharged from the colliery at which he worked. In the intervals between his fits, he was good-natured and amiable, and was liked by his companions, but after the fits he was dangerous, being prone to seize upon anything which might be at hand, and to attack those who were near him. In the hope that a sea-voyage might do him good, he went to sea, but returned after some months unimproved; he had lost the bright look of intelligence, and had got the heavy, lost look, so often seen in confirmed epilepsy. Such was his condition when, one evening after drinking a little, he saw a man lying asleep in a field. He did not know the man, and might be presumed, therefore, not to have had any malice against him, unless on the principle on which Charles Lamb damned a man whom he did not know —*at a venture*; he did not want to rob him, for he might have done that without waking him in this world or the next; he had not premeditated murdering him, seeing that he had only stumbled upon him accidentally, and there was no evidence that he was wandering about seeking some one whom he might murder; it is not to be supposed that a person of his weak intellect had an æsthetic love of murder and was eager to perfect himself in it as one of the fine arts: all such motives were wanting, but there was the man's head lying in a very tempting manner, and there was a big stone near, so he took up the stone and with all his might dashed out the sleeping man's brains. Having done this, he lay down by the side of his victim, and went to sleep. When he woke,

he was taken into custody, *suspecto*, if not of the murder, at all events of being implicated in it. In due course he was put on his trial, when he was worse than undefended, for he was defended by counsel appointed at the last moment by the judge; thus he gained the miserable semblance of a defence, and the conscience of the court was satisfied. We shall be acknowledged to be amply justified in stigmatising the miserable semblance of a defence when we add that at the trial not a word was said of his epilepsy, not a word of his weak intellect, not a word of his history up to the events of the night of the murder; he was moreover condemned on mere suspicion, and with him was condemned an entirely innocent man, who gave an exactly true account of his actions during the night of the murder, but was not believed. Such a blind and terrible error of justice might well make all good men sad and anxiously thoughtful; but it does not so affect the "Saturday Review," which gloats over the unjust executions which it has instigated, and yells savagely for more trophies of its honourable prowess.

There can be no doubt that Bisgrove would have gone to his violent death, as many other insane prisoners have, but for the prompt action of a benevolent clergyman, who, though knowing nothing of him, was struck with the motiveless and strange character of the murder, and made enquiries into his history. This gentleman at once wrote to the Home Secretary, communicating the results of his investigation, which were confirmed by the examination made by the chief constable of the county at the request of Mr. Bruce. A reprieve most properly followed, since which a regular enquiry into the state of Bisgrove's mind has been made by the Visiting Justices of the gaol, and he has been removed to the Broadmoor Asylum.

It would be a work of supererogation to point out to the readers of this journal the characteristic features of epileptic insanity displayed in Bisgrove's case. Every one who knows anything of asylum life knows how dangerous and violent epileptics often are after their fits, and every one who has studied the connection between blind homicidal or other desperate impulse and epilepsy, knows how frequent it is. To hang an epileptic for a murder done openly, without premeditation, without malice, without motive, whose mind has been hopelessly weakened by his disease, and who lies down to sleep by his victim's side immediately after he has killed him, would be hardly more reasonable and less barbarous than to hang a man for doing murder in his sleep.

The Structure of the Cerebral Convolutions.

The following clear and concise summary of Mr. Lockhart Clarke's latest researches into the structure of the cerebral convolutions has been contributed by him to the second edition of Dr. Maudsley's *Physiology and Pathology of the Mind*. As they are of the greatest importance, and have not been published elsewhere, we reprint them here:—

"In the human brain most of the convolutions, when properly examined, may be seen to consist of at least *seven* distinct and concentric layers of nervous substance, which are alternately paler and darker from the circumference to the centre. The laminated structure is most strongly marked at the extremity of the *posterior* lobe. In this situation all the nerve-cells are *small*, but differ considerably in shape, and are much more abundant in some layers than in others. In the superficial layer, which is pale, they are round, oval, fusiform, and angular, but not numerous. The second and darker layer is densely crowded with cells of a similar kind, in company with others that are *pyriform* and *pyramidal*, and lie with their tapering ends either toward the surface or parallel with it, in connexion with fibres which run in corresponding directions. The *broader* ends of the pyramidal cells give off two, three, four, or more processes, which run partly towards the central white axis of the convolution and in part horizontally along the plane of the layer, to be continuous, like those at the opposite ends of the cells, with nerve fibres running in different directions.

"The third layer is of a much paler colour. It is crossed, however, at right angles by narrow and elongated groups of small cells and nuclei of the same general appearance as those of the preceding layer. These groups are separated from each other by bundles of fibres radiating towards the surface from the central white axis of the convolution, and, together with them, form a beautiful fan-like structure.

"The fourth layer also contains elongated groups of small cells and nuclei, radiating at right angles to its plane; but the groups are broader, more regular, and, together with the bundles of fibres between them, present a more distinctly fan-like arrangement.

"The fifth layer is again paler and somewhat white. It contains, however, cells and nuclei which have a general resemblance to those of the preceding layers, but they exhibit only a faintly radiating arrangement.

"The sixth and most internal layer is reddish-grey. It not only abounds with cells like those already described, but contains others that are *rather larger*. It is only here and there that the cells are collected into elongated groups which give the appearance of radiations. On its under side it gradually blends with the central white axis of the convolution, into which its cells are scattered for some distance.

"The seventh layer is this central white stem or axis of the convolution. On every side it gives off bundles of fibres, which diverge in all directions, and in a fan-like manner, towards the surface through the several *grey* layers. As they pass between the elongated and radiating groups of cells in the *inner* grey layers, some of them become continuous with the processes of the cells in the same section or plane, but others bend round and run *horizontally*, both in a transverse and longitudinal direction (in reference to the course of the entire convolution), and with various degrees of obliquity. While the *bundles* themselves are by this means reduced in size, their component *fibres* become finer in proportion as they traverse the layers towards the surface, in consequence, *apparently*, of branches which they give off to be connected with cells in their course. Those which reach the outer grey layer are reduced to the finest dimensions, and form a close network with which the nuclei and cells are in connexion.

"Besides these fibres, which *diverge* from the central white axis of the convolution, another set, springing from the same source, converge, or rather curve inwards from opposite sides, to form arches along some of the grey layers. These arciform fibres run in different planes—transversely, obliquely, and longitudinally—and appear to be partly continuous with those of the *divergent* set which bend round, as already stated, to follow a similar course. All these fibres establish an infinite number of communications in every direction between different parts of each convolution, between different convolutions, and between these and the central white substance.

"The other convolutions of the cerebral hemispheres differ from those at the *extremities of the posterior lobes*, not only by the comparative faintness of their several layers, but also by the appearance of some of their cells. We have already seen that, at the extremity of the *posterior lobe*, the cells of ALL the layers are *small*, and of nearly uniform size, the inner layer only containing some that are a little larger. But, on proceeding forward from this point, the convolutions are found to contain a number of cells of a *much larger kind*. A

section, for instance, taken from a convolution at the vertex, contains a number of *large*, triangular, oval, and pyramidal cells, scattered at various intervals through the two inner bands of arciform fibres and the grey layer between them, in company with a multitude of smaller cells which differ but little from those at the extremity of the posterior lobe. The pyramidal cells are very peculiar. Their bases are quadrangular, directed towards the central white substance, and each gives off four or more processes which run partly towards the centre, to be continuous with fibres radiating from the central white axis, and partly parallel with the surface of the convolution to be continuous with *arciform* fibres. The processes frequently subdivide into minute branches, which form part of the network between them. The opposite end of the cell tapers gradually into a straight process, which runs directly towards the surface of the convolution, and may be traced to a surprising distance, giving off minute branches in its course, and becoming lost, like the others, in the surrounding network. Many of these cells, as well as others of a triangular, oval, and pyriform shape, are as large as those in the anterior grey substance of the spinal cord.

"In other convolutions the vesicular structure is again somewhat modified. Thus, in the surface convolution of the great longitudinal fissure, on a level with the *anterior* extremity of the corpus callosum, and therefore corresponding to what is called the superior frontal convolution, all the three inner layers of grey substance are *thronged* with pyramidal, triangular, and oval cells of considerable size, and in much greater number than in the situation last mentioned. Between these, as usual, is a multitude of nuclei and smaller cells. The inner orbital convolution, situated on the outer side of the olfactory bulb, contains a vast multitude of pyriform, pyramidal, and triangular cells, arranged in very regular order, but none that are so large as many of those found in the convolutions at the vertex. Again, in the *insula*, or island of Reil, which overlies the extra-ventricular portion of the corpus striatum, a great number of the cells are somewhat larger, and the general aspect of the tissue is rather different. A further variety is presented by the *temporo-sphenoidal* lobe, which covers the *insula* and is continuous with it; for while in the superficial and deep layers the cells are rather small, the middle layer is crowded with pyramidal and oval cells of considerable and rather uniform size. But not only in different convolutions does the structure assume,

to a greater or less extent, a variety of modifications, but even different parts of the same convolution may vary with regard either to the arrangement or the relative size of their cells.

"Between the cells of the convolutions in man and those of the *ape tribe* I could not perceive any difference whatever; but they certainly differ in some respects from those of the larger Mammalia—from those, for instance, of the ox, sheep, or cat."

Dr. A. O. Kellogg on the Non-Restraint System.

The American Journal of Insanity, for January, 1869, contains *Notes of a visit by Dr. Kellogg, to some of the principal Hospitals for the Insane in Great Britain, France, and Germany, with observations on the use of Mechanical Restraint in the treatment of the Insane.* The British Asylums visited by him were Prestwich, Morningside, St. Luke's, Hanwell, Colney Hatch—also the Richmond District Asylum, Dublin, St. Patrick's Hospital, and the Killarney District Asylum.

As the result of his travels, Dr. Kellogg theorises against the non-restraint system. He informs his American readers that one method by which the non-restraint system is, in difficult cases, carried out in England, is the "soaking" in the "refractory bath." His description of this "refractory bath" will be as novel to the readers of the *Journal of Mental Science* as to Dr. Kellogg's across the Atlantic.

As the "refractory bath" is, we believe, unknown in this country, we will try in this place to give some idea of what it is. It consists of an ordinary bath tub, covered with a board in which there is a round opening, just large enough to grasp the neck of the patient securely, leaving the head to be showered, perhaps, with cold water above, while the body is in the bath below; reminding one of the stocks anciently in use in England for offenders, with this important difference, that whereas only the feet of the criminal were "in chancery" the head of the "refractory" insane man was in this position, thus confining him as effectually as though it was in the ancient pillory. We saw in England the head of one unfortunate in this modern one, and were told he had been treated thus during several hours a day for a week at a time. We asked the young physician who conducted us, if this part of the non-restraint system was looked upon as medical and curative, or moral and disciplinary. "Both," was the prompt reply. "Do you blister?" we continued, "in certain cases?" "Certainly," said he. "And do you regard the blister as a medical or moral means?" we continued. He smiled, and said that the blister was also regarded as having a two-fold efficacy in certain cases.

Now, we object to such means, as being neither medical nor moral; and question the consistency of those who seek to disparage a camisole or muff put on a violent patient, or one who persistently denudes himself, because public sentiment is opposed to it, while he takes his own patient to this, "refractory bath," and puts his head through a hole in its cover just large enough to encircle his neck, whether he calls the operation a medical or moral means—restraint or non-restraint."

We are very unwilling to cast doubt upon the veracity of any gentleman. We may, however, state with some confidence that the Commissioners in Lunacy are ignorant of the whereabouts of this "refractory bath," and we think that Dr. Kellogg is bound to furnish them with the locality. We should also like to know the name of the "young physician" whom he thus, as we believe, libels in the above extract.

Dr. Kellogg saw another curiosity of the non-restraint system, which we also quote:—

We were shown one patient who had been secluded in a padded room for more than a year, because he persistently denuded himself. During this time he had suffered a fracture which, under the non-restraint system pursued, had been allowed to heal as best it might, without reference to deformity. When the door of his room was opened a strong muscular man was seen crouching on the remains of a mattress and blankets in one corner, in a state of complete nudity.

Again, in his account of his visit to Hanwell we have an insight into Dr. Kellogg's method of investigation, and the sources of the information he gleaned in his foreign tour. He was attended in his visit by the "Inspector" or head attendant, who appears to have been fifteen years there, and whose opinion Dr. Kellogg regarded as "worth as much as his juniors in years, but superior in office." His conversation with this intelligent functionary must be given in the original:—

'What do you do with your persistent masturbators?' we asked the above official. 'Let them masturbate till they die,' was the prompt reply. 'Do you not consider that a more extended mechanical restraint, properly regulated, and under strict medical supervision, would be beneficial in certain cases?' 'Certainly,' said he, promptly, 'but medical authority is not supreme here. That is in the hands of others, who frequently have little idea of the necessities of certain cases we have to deal with, and public opinion is against it; and no medical man can advocate it without losing caste with the Com-

missioners, whose unfavourable report as to the treatment of his patient will deprive him of his position.' We hope this will not fall under the eye of the Visiting Commissioners of Hanwell, for this faithful servant of fifteen years might be deprived of his position for speaking his mind freely on the subject of mechanical restraint.

Dr. Kellogg states his opinion on the use of mechanical restraint in an extract from the report of the Utica Asylum for 1864. Their practice is very similar to that in use in most continental asylums, and includes strait-waistcoats, padded leather wristlets, waist-belts, leather muffs, and a contrivance similar to Dr. Lauder Lindsay's protection bed, against the use of which we recently elsewhere protested. Yet no fallacy, (writes Dr. Conolly), can be greater than that of imagining what is called a moderate use of mechanical restraint to be consistent with a general plan of treatment, in all other respects complete, and unobjectionable, and humane.

It is indeed weary, heartless work, going over the old objections to the non-restraint system. They were all finally disposed of by Dr. Conolly, in his last work. A more perfect answer still is (with all deference to Dr. Kellogg's fiction about the use of the "refractory bath") that in the public asylums of England, containing 30,000 patients, no mechanical instrument of restraint whatever has for the last fifteen years been used. Moreover, the condition of the patients in these asylums is, by the unanimous report of all competent visitors, in every way better than those similarly placed in the continental or American asylums, where the old restraint system still lingers.

St. Luke's Hospital for Lunatics.

The following letter appeared in the "Times" of the 27th February :—

SIR.—With reference to the various strictures on the management of St. Luke's Hospital, recently admitted into your columns, we, the undersigned members of the committee, think it right to protest against such unfair and garbled statements; and at our meeting this day, being desirous of the fullest investigation, resolved that a letter be addressed to the Lord Chancellor requesting that he will cause an

independent inquiry to be made as to the condition and management of the Hospital.

We are, Sir, your obedient servants,

H. F. S. LEEFEVRE, Treasurer.	P. CAZENOVE.
CHAS. WOODWARD, F.R.S.	JOHN WILLIAMS.
AND J.P.	F. BARRON.
ARTHUR POWELL.	F. R. PHILP, M.D., Cantab.
CHARLES FEW.	MARK WM. HUNTER.

Feb 26th.

There can be no doubt of the necessity of such an inquiry, if only from the fact that it is found necessary, year by year, to sell several thousand pounds of the funds of the Hospital in order to maintain the present state of things.

St. Luke's Hospital is no longer called upon to exercise the office of a Public Hospital for the Insane Poor. The legislature have provided public asylums, free of charge, for the insane poor in every county in England. The requirement of the day left unfulfilled, is a middle-class asylum, where for small payments—about ten shillings a week—recent cases of mental disease could be admitted for treatment. The authorities at St. Luke's could readily fill their present hospital with 300 patients of this class, whose payments at 10s. a week would at least meet all costs of food, attendance, and medical extras, and enable the funds of the hospital to be applied solely to the house expenses and the necessary repairs, &c. The middle classes do not ask for free treatment for their insane relatives, but are willing and anxious to pay the usual cost of maintenance as charged in the county asylums (10s. a week), if only they knew where to find such a house. Herein lies alike the opportunity and the duty of the Governors of St. Luke's, and we believe that any official enquiry into their administration would convince all well-wishers of the hospital of this fact. We shall look with anxious interest to the reply of the Chancellor to the above application by the Committee of St. Luke's FOR AN INDEPENDENT INQUIRY AS TO THE CONDITION AND MANAGEMENT OF THE HOSPITAL.

PART II.—REVIEWS.

1. *Researches on the intimate Structure of the Brain, human and comparative. Second series on the Structure of the Medulla Oblongata.* By J. LOCKHART CLARKE, Esq., F.R.S., *Philosophical Transactions*, pt. 1, 1868.
2. *Researches on the intimate Structure of the Brain. First Series.* *Philos: Trans:* pt. 1, 1868.
3. *The Grey Substance of the Medulla Oblongata and Trapezium.* By JOHN DEAN, M.D. *Washington*, 1864.
4. *Microscopic Anatomy of the Lumbar Enlargement of the Spinal Cord.* By JOHN DEAN, M.D. *Cambridge, U.S.*, 1861.
5. *Researches into the Structure of the Spinal Cord.* By J. LOCKHART CLARKE, Esq., F.R.S. *Philosop. Transact.* 1851, 1853, 1859.
6. *Illustrations of Diseases of the Nervous System.* By J. HUGHLYNGS JACKSON, M.D. *London Hospital Reports*, 1864 and seq.

Of the present generation of scientific anatomists not one can be pointed out who has shown himself more thoroughly imbued with the spirit of Charles Bell than has John Lockhart Clarke, whose latest researches into the minute anatomy of the nervous centres are now before us. Upon his shoulders (to use a hackneyed metaphor) Sir Charles Bell's mantle has fallen; and not only may it be said to have fallen, but it may be affirmed that it is worn with becoming dignity.

The former investigations of Mr. Lockhart Clarke, on the minute anatomy of the spinal cord and medulla oblongata have already thrown so much light upon the functions of these parts, and have given such promise of still further elucidation of many obscure problems in pathology, that we have thought our readers might not consider it an unprofitable occupation of our space if, in reviewing the latest publication on anatomy of the medulla oblongata, that, namely, which stands at the head of the preceding list of books, we take occasion to bring

together an outline of Mr. Clarke's previous researches on the spinal cord and medulla oblongata, incorporating therewith some notice of the observations of Dr. Dean, of Washington, who has also industriously prosecuted similar studies. This plan appears to be the more necessary as the medulla oblongata is formed essentially by morphological changes of the medulla spinalis.

From Mr. Clarke's elaborate papers we find that in the spinal cord the three following divisions offer themselves for the study, according to the author's arrangement, of its several parts and elements, viz.:

1. The structure of the white columns.
2. The form and structure of the grey matter.
3. The origin and course of the nerve roots.

1. Structure of the white columns. When a longitudinal section of the white columns is made they present the appearance of parallel fibres placed lengthwise. A closer examination however shows that these fibres follow different courses, viz., transverse, oblique, and longitudinal, and that mixed with these are blood-vessels, the whole united by connective tissue. The *transverse* fibres can be traced in connection with the nerve-cells of grey matter, and with the nerve roots, forming a kind of plexus among the longitudinal fibres. The *oblique* fibres proceed from the grey matter, and after passing upwards and downwards for variable distances, become *longitudinal*; these are the most superficial and lie parallel to each other. They were described by Dean as following various courses, forming loops and angles, the fibres being braided together in the most complex manner. A thin transparent section of the cord coloured with carmine will show the arrangement of the transverse and longitudinal fibres, the former passing among the cut ends of the latter and mapping them out into circumscribed bundles, at the same time giving, as it were, a demonstration of their structure. The axis-cylinder of each fibre takes the colour of the carmine, while the surrounding sheath remains uncoloured—the dyed ends thus thickly dotting the field of the object glass of the microscope. The same section will show the relative positions of the fissures, median and lateral, which allow the passage of vessels. These are well seen in transparent injected sections. The principal supply is by two arterial trunks running along the bottom of the anterior fissure, and sending off branches right and left to pierce the anterior commissure on each side of the central canal, and thence to divide and sub-

divide into minute branches almost as numerous as the nerve processes, and forming meshes among the cells and processes of the grey matter. Vessels may also be traced traversing the longitudinal fibres and derived, at various points, from the pia mater. All these fibres and vessels are united by a basis of connective tissue in which are distributed a multitude of minute cells or nuclei, giving off fibres of areolar tissue, and which also are believed to stand in close relationship to some of the nerve fibres. This connective tissue or "neuroglia" is often well seen at the edges of very thin transparent sections, having a sort of honeycomb appearance from the falling out of the cut ends of longitudinal white fibres.

The connective tissue in which the nerve fibres of the spinal cord and medulla oblongata are thus, as it were, imbedded, possesses a degree of importance as the seat of those changes which Mr. Clarke has demonstrated that the nerve-tubes and cells undergo in tetanus and other disease of the spinal cord. The cases of such lesions and changes that Mr. Clarke has published are not now small in number. We have ourselves had several opportunities of verifying the author's pathological observations on this point.

The form and structure of the grey matter of the spinal cord differs in its arrangement from that which it presents in the medulla oblongata, inasmuch as in the former it is enclosed by the white columns, while in the latter the columns and their contained grey matter diverge outwardly. The general outline of the anterior and posterior horn and the central parts is well-known. At the lower extremity of the spinal cord (*the filum terminale*) the grey matter is reduced to a mere fringe, from the edges of which a series of processes pass through white fibres to the pia mater. In ascending from the *filum terminale*, we come to the lower portion of the cord, termed the *conus medullaris*, in which the central portion presents the outline of the horns, commissures and fissures. In the lumbar region the parts assume their several distinct forms; the posterior cornua become broad, and separate from each other, while the "posterior vesicular column," first described by Mr. Lockhart Clarke, begins to appear as a group of caudate cells behind the central canal. This group is one of great importance, and will be traced throughout the length of the cord to the nucleus of the vagus in the medulla. With the change in form of the posterior cornua, a change is also observable in the anterior; these turn outwards, and have irregularly club-shaped extremities. The caudate vesicles become much more numerous, and are grouped together in large clusters.

In the dorsal region the posterior horns form a single mass extending across from side to side, while the anterior, long, straight, and narrow, project directly forward; the caudate vesicles are also less numerous, and collected in one or two small groups.

Ascending towards the cervical enlargement, the grey matter again assumes an outline approaching in resemblance to that of the lumbar region; the posterior cornua are more separated, and the commissural bands are more distinct; the anterior cornua are here broader and longer, and contain a greater number of caudate cells. While from the anterior and lateral columns fibres cross in front of the central canal, forming the anterior commissure, which encloses also processes from the cells, the posterior commissure is slight and sometimes even wanting. An imaginary line, passing through the central canal and lateral white columns, divides the anterior and posterior cornua. From the upper part of the lumbar to the lower part of the cervical region, the lateral portion contains a vesicular tract, named by Mr. Lockhart Clarke the *tractus intermedio-lateralis*. It consists of caudate cells, which send processes to the lateral columns and transverse commissure.

Mr. Clarke has shown this to be the motor column of the respiratory muscles. To it are traceable the roots of the spinal accessory nerve, in the nucleus of which it is finally merged.

In order to ensure accuracy of expression, Mr. Clarke describes each posterior horn as consisting of *caput* and *cervix* —the *caput* being the expanded end, the *cervix* the remainder of the cornua as far as the imaginary line above indicated. The *caput* exhibits, at its outer border, a comparatively transparent portion, termed the *gelatinous substance*, in which also are caudate cells, and tubules of small size having a double contour.

The *cervix* contains in its inner portion another important cluster of cells, termed “posterior vesicular column,” extending the entire length of the cord, and becoming, as already stated, the nucleus of the vagus nerve. The fibres, intricately interlaced and interspersed with these cells, are derived in part from the roots of the posterior nerves.

Cells. The cells of the grey matter present great variation in form, size, and in the number of processes; but there is no definite variation in accordance with the supposed or actual functions of the parts to which their fibres are distributed.

The caudate cell is an independent structure, giving off prolongations from its outer substance, and not, as supposed by Dean, a mere enlargement of the axis cylinder. The so-called cells of the white substance are the cells of connective tissue—or they may be cells isolated from grey matter by the plane of the section. In very thin and clear sections the cell processes may be seen passing from one cell to another; but great care is required to guard against optical illusion in this case, by frequent and cautious adjustment of the focus of high powers of the microscope.

The central canal is lined with columnar epithelium, which send out processes into the surrounding neuroglia. On the connections of these processes Mr. Clarke remarks: *“By the most careful examination of some hundreds of preparations, I have never been able to perceive that the epithelial processes are connected with any other than the *small* cells or nuclei which I have already described. I have sometimes seen the processes of a *large* nerve-cell extend close up to the epithelium, but I have generally succeeded in tracing it round the canal to the *opposite side* of the cord. (In the coccygeal region of the cord, processes from the nerve-cells in the anterior cornu may be very distinctly seen to cross, both in *front* and *behind* the canal to the *opposite side*.) If the processes of the epithelial cells were directly continuous with, and formed elementary parts of, *nerve*-cells and *nerve*-fibres, we might reasonably expect to find the number of the former always in proportion to that of the latter; but the very reverse is the case; for, as we have just seen, in the *filum terminale*, where both *nerve*-cells and *nerve*-fibres have *entirely disappeared*, the canal is much *larger*, and the *epithelial cells* are consequently much more numerous than in any other region; while, as I have already shown, their processes may be traced through the surrounding white substance as far as the surface of the cord.”

Origin and connection of nerve-roots.—A longitudinal section of the cervical enlargement shows the posterior roots of the nerves to be composed of three kinds of fibrils. The first traverse the posterior longitudinal column in a compact bundle, at a right angle into the grey substance, and after running down the cord for a considerable distance, send some fibrils into the anterior grey substance, interlacing each other in a complicated manner, and some pass over to the opposite side, through the posterior commissure behind

* Philosoph. Transactions. Part I. 1859. P. 456.

the canal. A few fibrils of the third kind proceed both upwards and downwards near the surface, then pass out again with the roots of nerves; the rest cross the white columns chiefly upwards, and, reaching the grey matter, form interlacements; the points at which they reach the grey matter is dependent upon the degree of obliquity of their course. It is impossible to determine whether any of these fibres reach the brain, but it is scarcely probable, since so many may be traced in divergent courses. The *anterior* roots, traced into the grey matter, may be seen winding about and mingling with the minute prolongations of the posterior roots. "It may then," Mr. Clarke observes, "be fairly laid down as a well-established fact, that nearly all, if not the whole of the fibres composing the roots of the spinal nerves, after passing through the anterior and posterior white column of the cord, proceed at once to its grey substance; and that, if any of them ascend directly to the brain, it must be those only of the posterior roots which run longitudinally in the posterior columns."

Although it is not certain that all the roots of nerves are derived from cells, the connection of roots with the cells in the grey matter has been established by the observations of the majority of observers, but, as already stated, some fibres of the anterior horns may be traced from the prolongations of the posterior roots.

Having thus far borrowed from Mr. Clarke's papers the principal facts observable in the formation of the cord, we shall, in as few words as possible, endeavour to place before our readers the changes undergone by the white and grey matter in their relative positions in the medulla oblongata.

In the spinal cord the grey matter holds a central position relatively to the white columns; in the medulla, the relation is to a great extent reversed by the divergence of the columns, the masses of grey matter appearing on the surface, while new structures also are developed. Thus the extremity of the posterior horn, the *gelatinous substance*, appears as the *tuber cinereum*, and the olivary bodies are new structures. The posterior columns, as the posterior pyramids, being thrown outward, the fourth ventricle is formed by the opening of the central canal, the posterior fissure of the cord being reduced to a mere sulcus. Among these structures thus altered are developed various nuclei of nerves, rendering this small portion of the nervous centres the most vitally important of all its parts. Continuous with the roots of the spinal nerves and

columns of caudate cells from below, and containing the roots of all the cranial nerves above, not even excluding connections with the optic and olfactory, it would be impossible to over-estimate the interest which attaches to the anatomy and physiology of the medula oblongata. It is well termed "a centre of compound co-ordination" by Mr. Herbert Spencer,* who in his usually felicitous manner describes the relation in which it stands to all the most important movements of the body, associating these, and so regulating them as to secure the harmony of the whole. "Being the centre which initiates and directs involved and extensive bodily actions entailing rapid expenditure, it is the centre in which the demand for material is indicated; and hence it becomes the regulator of the aeration of the blood, and of the visceral actions generally. Clearly, then, its co-ordinations are compound in comparison with those of the spinal cord—compound, because the impulses which it sends are also more numerous and more heterogenous; and compound, because it brings more involved acts into correspondence with more involved stimuli."

The order of the development of nuclei and nerve roots in the medulla is thus summed up by Mr. Clarke. "1°. From the outer (posterior) part of the cervix or neck of the posterior horn are developed the post-pyramidal and rectiform nuclei, which, higher up, form the nuclei of the auditory nerve, while the caput cornu, or dilated extremity of the posterior horn, is thrown aside to be traversed by the vagus and glosso-pharyngeal nerves, and ultimately to become the principal nucleus of the large root of the trigeminus. 2°. From the *base* of the cervix cornu, behind the central canal, is developed the *special* nucleus for the spinal-accessory, vagus and glosso-pharyngeal nerves. 3°. The *base* of the *anterior* grey substance in front and at the side of the canal is developed into, or at least replaced by, the *special* nucleus giving origin to the *upper* roots of the hypoglossal nerves. 4°. The *lateral* parts of the grey substance between the extremities of the anterior and posterior horns, including what I have named the *tractus intermedio-lateralis*, is especially connected with the *lower* roots of the spinal-accessory nerves. 5°. In ascending from the cord to the medulla, the remaining part of the anterior grey substance, which lies against the inner side of the anterior column, or the so-called non-decussating

* Psychology. 1868. P. 58. We are glad to see that Mr. Spencer is publishing (in quarterly parts) a new edition of his well-known "System of Philosophy."

portion of the pyramid, and from which the *lowest* set of hypoglossal roots arise, gives place to the groups of cells forming the lower end of the olfactory body, which, as it swells out, becomes connected with the anterior part of the antero-lateral column." (P. 319).

"We must, therefore, regard the olfactory body as a large motor nucleus, which is directly continuous by its white and grey substances with the *anterior* white and grey substance of the spinal cord. The only other purely motor centre of the medulla oblongata is the hypoglossal nucleus which is developed from the *base* of the anterior grey substance. It is located apart from the olfactory body, and is in closest connection with the vagus, spinal-accessory and glosso-pharyngeal nuclei with which it is destined to co-operate in reflex actions. Although distant from the olfactory body, it is however, connected with it by a remarkable band of fibres."

"It is probable that the olfactory bodies are not only the centres through which different movements are co-ordinated for expressing the passions and emotions, but that they are the motor centres through which different movements are effected by sudden, violent, or peculiar impressions on the special senses; for they are intimately connected with all the sensory ganglia of the medulla, with the grey tubercle (trigeminus), the vagus nucleus, the post pyramidal and restiform nuclei (auditory ganglia), the corpora quadrigemina (optic ganglia) through the fillet, and not improbably with parts about the root of the olfactory bulbs, since I have traced the olfactory columns nearly to the perforated space." (P. 319).

Mr. Clarke states that before the publication of his memoir on the Medulla Oblongata in 1858, it was believed by anatomists that the decussating fibres of the anterior pyramids are continuous only with the lateral columns of the opposite side of the spinal cord. He adds:—"I have shown, however, that they are connected not only with the *lateral*, but with the *anterior* columns, and with both the anterior and posterior *grey substance*." The decussating fibres of the anterior pyramids are connected with—"1, the anterior-lateral grey substance; 2, the anterior border of the caput cornu, or expanded extremity of the posterior horn; 3, the base of the cervix cornu on each side of the central canal; 4, the continuation of this part of the cervix cornu in the posterior column, forming its grey nucleus, and subsequently contributing to form a large portion of the outer nucleus of the auditory nerve; and 5, the side of the spinal accessory and hypoglossal nuclei."

By virtue of these connections, Mr. Clarke considers it presumable that the anterior columns are excito-motory, probably through the grey substance within the pyramids themselves, the pons varolii, or both. Mr. Clarke further observes, "these connections are exceedingly interesting in a physiological point of view." Thus the several different centres of origin of the spinal accessory nerve bring that nerve into physiological communication with the origin and distribution of other nerves. The lower roots of the spinal accessory arise from the lateral and anterior grey substance, as low down as the anterior roots of the cervical spinal nerves, and the nucleus of the hypoglossal nerve. These supply the muscles employed in forced inspiration, while the upper roots, arising from nuclei behind the central canal, form the branch which joins the vagus, and are distributed to larynx, pharynx, and palate.

"Now it is particularly interesting," adds Dr. Clarke, "to find, as I first showed in 1858, that decussating fibres of the anterior pyramid, in their course downward from the cerebrum, turn obliquely backwards to the point about which the *special nucleus* and *upper roots cease to arise*, and the *lower roots begin*. . . . There appears then to be scarcely a doubt that *these* particular decussating bundles of the anterior pyramids are the channels through which the will influences the movements of respiration. It is very probable also that they are functionally related in the same way to the hypoglossal nuclei, or at least that they are *one* of the channels through which the will acts on the hypoglossal nerves." P. 311.

Although the reflex action of the medulla oblongata be the same essentially as that of the medula spinalis, yet the medulla oblongata is the seat of reflex action among the centres most important to life—those for instances controlling the functions of respiration, deglutition, the actions of the heart, the contractions of the pupils of the eye, &c.

To illustrate the pathological applications of Mr. Clarke's researches we may quote from the author (p. 310) the following case, which, however, we have been compelled somewhat to abridge.

A lady, æt 55, fell down suddenly in a state of unconsciousness. When she recovered her senses she was hemiplegic on the right side, and unable to speak. She regained the use of her arm and leg, with only some slight remaining weakness, and the power of articulation returned with only some slight impediment. During the next four or five years she had several

slight and partial attacks of paralysis, with some additional defect of articulation. This lady was the subject of gout. Two years before her death deglutition became much impaired. A year later she had an attack of partial unconsciousness, which rapidly passed away; but from that time the power of articulation was almost lost. She could say 'yes,' or 'no,' and one or two short words, but nothing more. She was almost unable to protrude her tongue. During two months or more she entirely lost the power to swallow—she partially regained the power to swallow, which she did but in the recumbent posture—mucus in the air-passages frequently excited spasmodyc coughing; but she had scarcely any voluntary power over the respiratory muscles, and was unable to cough voluntarily. She could scarcely do more than *whisper* the few words she was able to articulate. the power of straining was completely lost, and large quantities of foecal matter collected in the rectum. Both arms and legs were very weak, especially the latter, so that she could scarcely walk even with assistance. Sensation was unaffected.

Omitting some details of the pathological appearances found on post-mortem examination, the following changes were noted in the nervous centres. Atheromatous arteries at base of brain—opacity of membranes—and remains of old clots in optic thalamus and corpus striatum on right side—remains of a clot in left optic thalamus. A cyst existed in the central white substance of the cerebellum on each side.

"The medulla oblongata was curiously misshapen, and tilted to the right side. This displacement appeared to be due chiefly to atrophy of the right corpus olivare. At the lower two-thirds of the olivary body the atrophy was considerable, but diminished along the upper third. Not only was the right olivary body exceedingly reduced in bulk, but the greater number of its nerve-cells were wasted to granular points or small granular masses, tinted brown or yellow by pigment.* Between the olivary bodies the central part of the medulla was softened, so that its lateral halves readily separated along the median raphè. Neither the hypoglossal nor the vagal nuclei were reduced in bulk to any remarkable degree; but the vagal nucleus, which in man normally contains a certain number of pigmentary cells, contained therein a much greater number than usual; and many of the cells of the hypoglossal nucleus had lost some of their sharpness of outline, and con-

* A drawing of these changes is given by Mr. Clarke.

tained more than their natural amount of pigment. All the central parts of the pons varolii were very much softened. The softening involved a large portion of the prolongations of the anterior pyramids, and extended backward to within a sixth of an inch of the fourth ventricle." (P. 314)

Mr. Clarke published a case of extreme atrophy of the nerve-cells of the spinal cord, in the British and Foreign Medico-Chirurgical Review, July, 1862, and two others also in the Medico-Chirurgical Transactions, 1867 and 1868. In the fourth volume of Beale's Archives of Medicine the process of degeneration in the cell is fully described. Many cases of the degeneration of the structures of the cord have been described in the medical journals by the author, and traced in their connection with symptoms observed during life. It cannot be too constantly borne in mind that, as has been observed by Sir Thomas Watson, and doubtless by others also, the injuries inflicted upon organs by disease should be regarded and studied as physiological experiments, and not viewed exclusively as pathological or preternatural phenomena — mere objects of scientific curiosity.

In another case related by Mr. Clarke, *left* hemiplegia, with difficulty of articulation, was followed by total loss of speech, insensibility and total paralysis of the tongue on both sides, inability to cough, difficulty of swallowing; sensation unimpaired; the principal changes observed were a softened state of the convolutions of the middle and anterior lobes, especially those along the point of the middle lobes bordering on the fissure of Sylvius, and those of the *insula*; the anterior perforated space and the orbital and adjacent convolutions were particularly soft. Both thalami optici were soft. On the surface of the *left* corpus striatum was a dark brown and softened depression about the size of a pea. Over the posterior half of the *right* corpus striatum and outer and fore part of the thalamus opticus, there was a chocolate-coloured and softened mass about the size of a hazel-nut. The surface of the fourth ventricle was softer than natural, and of a pale yellow or cream colour. In the medulla oblongata, on the left side, a small rust coloured spot was observed at the origin of the vagus nerve; and in the same section there was a dark rust coloured streak on the inner side of the right anterior pyramid. A third of an inch below the pons varolii another rust coloured spot, about the size of an ordinary pin's head, was found in the substance of the posterior convolutions of the olivary body. This was proved by microscopic

examination to be the remains of an old clot. It descended the medulla about the third of an inch, gradually diminishing, and at length occupying the part immediately behind the convolution of the olivary lamina, amongst the deep arciform fibres." (P. 314).

Valuable as these cases are, adds Mr. Clarke, "they by no means prove that the loss of articulate speech was due to the lesions in the olivary bodies; since it is impossible to say how far it might have been dependent on the numerous and extensive alterations which were found in other parts of the brain."

To Dr. Hughlings Jackson the science of medicine is indebted for much light which he has thrown upon disease of the nervous centres. By his ceaseless labours the connection between symptoms and lesions has been established, where hitherto all had been conjecture; this has been more particularly the case where loss of or impairment of speech has been involved. He carefully distinguishes between those cases in which the obstacle to utterance is in the brain, and those in which the impediment exists in those lower centres to be found in the medulla oblongata directly controlling the muscular movements of articulation. Thus in the London Hospital Reports 1864, p. 343, he relates a case of "crossed paralysis," and offers the following explanation, founded obviously upon what minute anatomy has shown to be the arrangement of nerve-roots in the medulla.

"Since the nerve-fibres for the limbs cross below the pyramids, those of the left arm and leg will pass on the right side of the pons on their way to the higher parts of the motor tract. But the facial nerve of the right side runs through the lower part of the right side of the pons to its nucleus on the floor of the fourth ventricle. So that a clot which damages the right facial nerve damages also the motor fibres which have come over from the left arm and leg. In the case to which these remarks apply there was paralysis of the superficial muscles supplied by the facial nerve on the right side, and of the left arm and leg, with sudden and total deafness on the right side."

In the same volume is also the report of a case which presented "paralysis of the tongue, palate, and vocal cord (and, doubtfully, of the orbicularis oris)." In explanation of the connection of these three symptoms, Dr. Jackson refers to the close anatomical connection of the vagus, spinal accessory, and lingual nerves pointed out by Lockhart Clarke, and their action as the centres of combined movements.

In the London Hospital Reports for 1865 also, Dr. Jackson has contributed a paper involving the consideration of diseases of the medulla oblongata. "The only symptoms," he observes, "that I can speak of with any precision, as being due to disease of the medulla oblongata, are (1) Saccharine urine, (2) Aphonia, (3) Difficulty of Articulation, (4) Difficulty of Swallowing, (5) General Weakness, and (6) Deafness." Of the details of the pathological views propounded by Dr. Jackson it would be impossible to give a fair abstract; the lecture itself will amply repay its study, as, we need scarcely say, will other papers on diseases of the nervous system which Dr. Jackson so freely contributes to the medical journals.

Dr. John W. Ogle has been no niggardly contributor to the pathology of the nervous centres; indeed a glance over the pages of the British and Foreign Medico-Chirurgical Review, and the Pathological Society's Transactions, will manifest how indefatigable has been his industry, and how heavy an obligation he has laid the profession under for his researches in this department of pathology. It would be out of place to transfer all we would fain transcribe from the papers by Dr. Ogle; we content ourselves with pointing to some half-dozen cases of tumours, &c., in the fourth ventricle, reported in the Brit. and For. Med.-Chir. Rev., April, 1865; also to a case related before the Pathological Society, in May, 1855. An extensive scrofulous deposit occupied the central and upper right portion of the medulla oblongata, about an eighth of an inch only in thickness of its anterior surface being left entire, and yet it was remarkable that but little disturbance of the functions of respiration and deglutition took place, "for it was not until quite the last that dysphagia came on." Dr. Ogle imagines that this may be explained by the slowness of formation of the tumor having allowed the adjacent parts to become accommodated to its presence; and furthermore that it may not have encroached upon the vagal nucleus until at last.

W. B. K.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

NOTE.—*The length of the Original Articles (Part I.), which we are always unwilling to curtail, compels us to omit the usual Quarterly Report on the Progress of Psychological Medicine.*

PART IV.—PSYCHOLOGICAL NEWS.

THE MEMORIAL OF A COMMITTEE OF THE MEDICO- PSYCHOLOGICAL ASSOCIATION,

APPOINTED AT A MEETING OF THE ASSOCIATION, HELD AT THE
ROYAL COLLEGE OF PHYSICIANS, LONDON, ON THE 4TH AUGUST,
1868.

1.—That the great and important progress which has been made, since the beginning of this century, in the knowledge of mental diseases and defects, and in the humane and scientific treatment of the insane, has rendered urgently necessary a searching and comprehensive enquiry into the relations of Medico-mental Science to the administration of justice. The knowledge of mental diseases which now exists has quite outgrown, and is entirely inconsistent with, certain leading principles which are accepted and applied in the procedure of courts of law. Some of these principles have originated in opinions regarding mental disease which are now obsolete. The metaphysical test of mental capacity, founded on a knowledge of right and wrong, or of good and evil, which is applied in criminal cases, furnishes a striking illustration of a direct antagonism between a legal dictum and medical science; it is well known to be utterly inconsistent with practical experience of insanity, the modern humane treatment of which is actually based upon the existence of such knowledge in the great majority of the insane. So decidedly is this truth recognised by all who are engaged in the care and treatment of the insane, that at a large meeting of the Medico-Psychological Association, held at the Royal College of Physicians, in July, 1864, the following resolution was unanimously agreed to:—

“ That so much of the legal test of the mental condition of an alleged criminal lunatic as renders him a responsible agent, because he knows the difference between right and wrong, is inconsistent with the fact well known to every member of this meeting, that the power of distinguishing between right and wrong exists frequently among those who are undoubtedly insane, and is often associated with dangerous and uncontrollable delusions.”

So long, therefore, as the metaphysical dictum is applied in the administration of the law, it is unavoidable that persons really insane, and irresponsible by reason of their disease, will be convicted of crime, and suffer unjustly ; and thus a first principle of justice continue to be violated.

II.—That the manner in which scientific evidence is procured and taken in courts of justice, in cases where the question of mental incapacity arises, is very ill adapted to elicit the truth, and to further the ends of justice. The incompetency of a jury to weigh and apply in a satisfactory manner evidence of a scientific character can hardly admit of doubt ; and when such evidence is presented to them, not with studied impartiality and completeness, but as evidence specially retained for the prosecution or the defence, they have no means of forming a correct judgment on the points at issue. It is evident that circumstances have very much changed since trial by jury was instituted. At that time the relations of life were simple, and one man's business was very much within the knowledge of another ; but the developments of modern life are so numerous, special, and complex, as to render necessary special experience in regard to many questions, in order to form a sound opinion concerning them. There are many scientific and technical matters for a knowledge of which a special and protracted education is required, and it is impossible to believe that a jury can, even under the guidance of the best judge who has not special knowledge, be instructed to the requisite point within the short period of the trial. When a person is acquitted of crime on the ground of insanity, or when his acts are invalidated on the ground of incapacity, the real questions for determination are as to the degree and kind of bodily disease which exists, and the amount of mental incapacity produced by it ; which are assuredly not questions to be decided justly without special knowledge of bodily and mental disease. The incompetency of a court as ordinarily constituted, is, indeed, practically recognised in a class of cases known as Admiralty cases, where the judge is assisted by assessors of competent skill and knowledge in the technical matters under consideration. Moreover, by the 15th and 16th Vict., c. 80, s. 42, the Court of Chancery, or any judge thereof, is empowered, in such way as he may think fit, to obtain the assistance of accountants, merchants, engineers, actuaries, or other scientific persons, the better to enable such court or judge to determine any matter at issue in any cause or proceeding, and to act upon the certificate of such persons. We respectfully submit that a method of correcting the present practice in the trial of intricate scientific questions might be founded on the principle admitted by Act of Parliament, and adopted in the trial of Admiralty cases.

III.—That an inquiry might be advantageously instituted into the relations between crime and mental disease or defect. This committee is of opinion that many inmates of prisons are persons of defective mental organisation, or sufferers from mental disease, and would en-

force the desirability of an investigation into the mental condition of criminals confined in gaols, and into the number of those committed to prison who have afterwards been transferred to asylums as insane. It has been publicly stated by Mr. Bruce Thomson, surgeon to the General Prison of Scotland, that one out of every nine prisoners who come under his care is more or less insane, and that one out of every one hundred and forty becomes irresponsibly so. He believes that many crimes are committed by epileptic criminals, when they are utterly unconscious and irresponsible for their acts. From a census of prisoners in English convict prisons taken March 31st, 1862, it appears that one in every twenty-five of the males was of weak mind, insane, or epileptic; this being the residue so afflicted after the elimination of such prisoners as had, at different times, been sent to lunatic asylums. The proportion of female convicts so afflicted was not so great. In Dr. Guy's report,* from which these facts are taken, it is stated that weak-minded, insane, and epileptic prisoners of both sexes are especially addicted to the crime of arson, and also, in a less degree, to crimes consisting in, or accompanied by, violence; and that male prisoners, answering to the same description, are prone to the commission of a class of crimes often, but not always, marked by violence—rape and offences *contra naturam*. In the official report of English Convict Prisons, June, 1868, the medical officer of Milbank prison states his conviction, "that the percentage of convicts who are rendered unfit to earn a livelihood by some inherited physical infirmity or defect of intellect is larger than is usually supposed." It appears also from "Judicial Statistics" (1867-8), that out of 1,244 criminal lunatics under detention, as many as 799 were found, or became, insane after sentence. These are but some of many facts which might be quoted to prove how greatly the proposed enquiry is needed, and how much benefit might be expected from it.

After taking some evidence on the subject of criminal lunacy, the recent Capital Punishment Commissioners recommended "further investigation." We respectfully but earnestly endorse that recommendation, being deeply convinced of the advantages that would accrue from a searching enquiry, by means of a Royal Commission, into the relations of mental science to the administration of justice, with a view to a revision of the existing system of criminal jurisprudence in its relations to insanity.

* On some result of a Recent Census of the Population of the Convict Prisons in England. By W. A. Guy, M.D., Trans. Soc. Science Association, 1862.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Second Quarterly Meeting of the Association was held on the 28th January, in the rooms of the Royal Medico-Chirurgical Society, Dr. Sankey, F.R.C.P., President, in the chair,

The minutes of the former meeting were taken as read, and confirmed. After some discussion as to the order of procedure, the President called upon Dr. Maudsley, who proposed the following resolution :

"That the Medico-Psychological Association cannot allow its first meeting, since the death of Professor Griesinger, to pass, without earnestly expressing its sincere recognition of his high moral qualities, his distinguished scientific labours, and his energy and humanity as a reformer of the treatment of the insane in Germany; and desires to convey to his widow its heartfelt sympathy with her in the heavy bereavement which she, in common with medical science, has sustained."

The resolution was seconded by Dr. L. Robertson, and unanimously adopted.

Clinical Discussion.

Dr. BOYD exhibited the crystalline lens of a woman, a patient in the Hampshire Asylum, under the care of Dr. Manley, in whom spontaneous evolution of the lens had occurred, in consequence of abscess in the cornea; she had suffered from anaemia, and much prostration of strength, and the lens had started out, upon her making a sudden attempt to rise from bed. Dr. Boyd mentioned that another instance of sudden expulsion of the lens, had been communicated to him as having occurred at Hanwell, the result of a blow inflicted by one patient upon another.

Dr. BOYD then exhibited two preparations, shewing atrophy of the cerebral hemisphere. In the first case that of Mrs. A. C., a female, there had been hemiplegia of the right side for nearly twenty years, the wrist, arm and ankle of that side were contracted and shrivelled, there was a difference of two inches in circumference between the limbs of the affected and unaffected side, the patient had frequent epileptic fits, and her mental symptoms were those of imbecility in the second degree; she could read a little, and was fond of music and singing. The case was mentioned in the xxxix vol of the Medico-Chirurgical Transactions, and the preparation, shewing marked atrophy of the left hemisphere, and especially of the middle lobe, was now in the possession of Dr. John Ogle, by whom it had been lent for the examination of the members.

The next specimen, taken by permission from the Museum of the Royal College of Physicians, shewed a remarkable degree of atrophy of the right hemisphere, with corresponding hemiplegia of the opposite side. In this case also there were frequent epileptic fits, and a mental state approaching to idiocy. The defect seemed congenital. There was the same wasting of the limbs of the affected side. The patient died of lumbar abscess. This case had also been recorded in the Transactions of the Medico-Chirurgical Society, and the diagnosis of atrophy of the brain had been made during life.

Dr. TUKE drew attention to the marked deficiency in the middle lobe and to the almost entire absence of the convolution of Broca in the first case, and he asked as to the power of speech in that patient.

Dr. SANKEY remarked upon the depressions existing in the left hemisphere, and asked Mr. Kesteven if he had examined them.

Mr. KESTEVEN stated that there was very considerable resemblance in this specimen to a brain exhibited at the last meeting by Mr. Lockhart Clarke, that much of the interest of the case depended upon the internal condition of the brain structure, but that without Dr. Ogle's permission it was thought better not to make any examination that would spoil the preparation. He undertook to procure Dr. Ogle's permission, and to report to the next meeting.

Mr. WARWICK asked as to the exterior of brain, and size of head.

Dr. BOYD replied that there was no loss of speech, in the first case ; in the second

articulation was imperfect, indeed almost lost. There was smallness of the head in both, no change in external configuration.

Dr. CHRISTIE exhibited the membranes of the brain of a man who during life exhibited the usual symptoms of general paralysis. The case was admitted into the North Riding Asylum, in Sept. 7th, 1867, labouring under all the symptoms of general paresis; he was 60 years of age; by occupation an agricultural labourer, married, and the father of twelve children. The disease was of one year's duration, and the apparent cause appeared to have been his dismissal from his situation. He had the character of a sober, steady man, and for some time was a total abstainer. None of his relatives are known to have ever been affected mentally, but some years back he had an attack of phrenitis. Till just lately was quiet, but during the last month has threatened violence to his wife. No evidence of a fit of any kind can be got.

On admission he presented the peculiar symptoms of speech with delusions of optimism and possession of property; the motor power was affected, and the tongue when protruded was tremulous; these symptoms continued till December 22nd, when he became totally helpless and had to be fed, noisy at night, and extremely dirty. He was ordered Tinct. Digitalis 3*fl*s three times a day with the best result. About May, 1868, he regained a good deal of power and was again about the ward, but in July the disease advanced rapidly and from this time he kept his bed, passing faeces and urine under him; gradually the symptoms increased and he died on January 4th, 1869.

Post-mortem examination. - Calvarium dense, with a dark spot about the size of a sixpence within the plates of the right parietal bone, evidently blood; membranes very thickened, with exudation between the dura mater and arachnoid, occupying the length of the right hemisphere, and about one and a half inch in breadth. The substance of the cerebrum was dense and heavy; a great deal of serosity within the membranes and ventricles; convolutions flattened, and waterlogged, with depression corresponding to the tumor within the membranes; the grey matter was plentiful; cerebellum generally healthy, with slight softening at base of left lobe.

Microscopical examination did not reveal anything.

The case was interesting as showing a complication of general paralysis, with meningeal apoplexy—a not very common occurrence.

Dr. RHYS WILLIAMS mentioned the case of a female who had recently been admitted into Bethlem Hospital, suffering from mania. Her hair had been carefully dressed and plaited by the nurse in charge, and, on being visited, after an interval of about fifteen minutes, she was found with the entire head of hair lying on the bed, evidently pulled out at one effort, and the scalp bleeding in several places. No one could have had access to her in the interval. She apparently suffered no pain.

The PRESIDENT then called on Dr. Robertson for his paper ON THE ALLEGED INCREASE OF LUNACY.—Dr. Robertson, stated that in 1844 there were 20,611 lunatics in England and Wales, or 1 in 802 of the population. In 1868 this number had risen to 50,118, or 1 in 432 of the population. The statistics of lunacy in France showed a similar increase in the total number of the insane, having risen from 1 in 796 of the population to 1 in 444 between 1851 and 1861. Dr. Robertson argued that this apparent increase was simply the result of more accurate registration of the insane, and the consequence of opening of the county asylums; and that all recent lunacy legislation tended directly to increase their recorded numbers. In examining the question at issue statistically, Dr. Robertson confined his observations chiefly to the numbers of the insane in asylums, and showed that the yearly increase observed had been in a decreasing ratio, passing in quinquennial periods since 1844, from an annual rate of increase of 5·6 per cent. to one of 3·8 per cent. in 1867. He showed that the same result followed in France; and he argued that this increase only represented the difference between the yearly admissions and the discharges and deaths. Among the private lunatics there is a decrease during the decennium 1857-67, despite the increasing population of the country. The proportion of pauper lunatics to the

population also remained nearly stationary, being '016 in 1857, and '019 in 1867. Tested by the admissions into the asylums during the same period (1857-67), the rate of increase is also in a yearly decreasing ratio, falling from 11·7 per cent. to an annual average of 3 per cent. From these facts, which were enforced by many elaborate statistical tables, Dr. Robertson deduced that the alleged increase of lunacy is a fallacy, and not borne out by the experience of the last decennium, 1857-67.—[*This paper is printed in full as the first article of Part I., Original Articles, of this number of the Journal of Mental Science.*]

The PRESIDENT said that the members must all feel deeply indebted to Dr. Robertson for his valuable paper; it was almost impossible to follow the statistical tables given by Dr. Robertson, but they appeared to prove his position, and that the fear of any very large increase in the material numbers of the insane to the population was unfounded.

Dr. TUKE said that he felt happy to second a vote of thanks to Dr. Lockhart Robertson for his valuable paper. He felt with the President the great difficulty of dealing with the details of the paper, in the absence of any tables before them. With regard to the alleged increase of insanity, Dr. Tuke had paid special attention to the question, and was able to say positively that in his opinion, in the upper class, at least, there had been no increase. That the absolute relative number of the insane poor now living had been increased there could be no doubt, but this arose from the improved modern treatment of the insane poor, whose life had been prolonged by the superior skill and care shewn in their treatment in the public asylums. The examination of the question as to the alleged increase of lunacy should be based upon the number of new cases occurring; the present frequency of cure, and prolongation of life, would fully account for the apparent relative increase of the pauper insane. In the upper and middle classes, in which the death rate had been always at a minimum, the number of the insane, according to the returns of the Lunacy Commissioners, had not increased. A member of the association had some four years ago read a paper upon the increase in the number of the insane, the conclusions of which he, Dr. Tuke, and Dr. Christie, had both challenged at the time. Dr. Lockhart Robertson's paper was most useful, as bringing the issue directly to the test of figures. Dr. Tuke quite agreed with Dr. Robertson's views.

Dr. BOYD remarked upon the tendency in the large public asylums to prolong life, rather than to cure the disease; he thought massing together large numbers of the insane interfered greatly with their proper medical treatment, and tended to diminish the number of cures.

Dr. CHRISTIE recollects the paper and discussion to which Dr. Tuke had alluded. As far as it was possible for him to follow the figures in Dr. Robertson's paper, he quite agreed with him. He had himself carefully watched the numbers in his own division of the county, and during a period of more than seven years, there had been no increase; in the last year (1867) there had been an absolute decrease.

Mr. WARWICK thought Dr. Lockhart Robertson's paper valuable, as tending to dissipate the idea that the increase of civilization had any influence upon the increase of lunacy. He thought statistical inquiry in this direction very valuable, and that government inquiry should be directed to the subject; accurate records of cases of lunacy were kept, and they should be accessible in a convenient form.

Dr. RHYS WILLIAMS agreed with Dr. Tuke as to the importance of estimating the existence of lunacy by the amount of recent cases as opposed to merely numbers resident. From his own observations, he quite coincided with Dr. Robertson's opinion, that there had been no relative increase in the number of the insane.

A vote of thanks to the President and Fellows of the Royal Medico Chirurgical Society, for the use of their rooms, terminated the meeting.

CORRESPONDENCE.

LETTER FROM PROFESSOR C. WESTPHAL.

To the Editors of the Journal of Mental Science.

DEAR SIRS,

You have done me the honour of publishing a translation of my Essay on "General Paralysis of the Insane" in the *Journal of Mental Science* (July 1868, January 1869), I trust, therefore, you will allow me to suggest that there are several misunderstandings in the translation, which may possibly alter the sense of the original. Of these misunderstandings I take the liberty of correcting only one, as in fact through it the greater part of my researches might appear hardly comprehensible.

The learned translator of my Essay expresses the German word "Körnchenzellen" by "nucleated cells;" its meaning is, however, to be rendered in English by "granulation corpuscles."

I have the honour to be

Yours truly,

PROF. WESTPHAL, M.D.

4, Bendler Strasse. Berlin.

March 10th, 1869.

THE EDUCATION, POSITION, AND PAY OF THE ASSISTANT MEDICAL OFFICERS OF PUBLIC ASYLUMS.

To the Editors of the Journal of Mental Science.

GENTLEMEN,

Though not at present, but hoping at an early date to become, a member of the Medico-Psychological Association, I venture to request the insertion in your next number of a few humble remarks on the education, pay, and position of the Assistant Medical Officers of our county asylums. I have read with much interest the observations you have already made on the subject in the October number of the *Journal* for 1867, and in the number of the same month for 1868, and I think that the Assistant Medical Officers of the present day ought to feel deeply indebted to you for your kindness and consideration in thus opening up the subject for discussion. The publication of a "Memorandum" on this topic by Professor Laycock, as a result of your remarks, shows the deep interest which he also takes in the welfare of Assistant Medical Officers, and he very well points out what is now wanting to enable us to secure really efficient men to fill these posts, and to give them their rights, and make them comfortable.

Speaking from experience, I feel that the system of having one or more resident clinical clerks attached to our large county asylums as a method of preliminary training for the post of Assistant Medical Officer is an excellent one, and I feel pretty confident that it will yet come to receive a gradual and general adoption. During a residence in an asylum as clinical clerk, one gets that knowledge and experience which is not got by mere attendance on theoretical and

clinical lectures on mental diseases. Such a course of lectures is undoubtedly a good and requisite preliminary to a clerkship, but I mean to say that as a clinical clerk, besides getting daily clinical experience, one gradually becomes acquainted with the working of the administrative department in asylum practice, which in itself involves one of the most important parts of the duty of medical officers of asylums. This of course is not touched upon, nor indeed very well could be, in a course of lectures on mental diseases. Besides these advantages, the clinical clerk performs the duties of the Assistant Medical Officer during temporary absence or illness, &c., and thus, as well as by his daily association with him in his duties, has sufficient scope for becoming amply acquainted with the duties of the Assistant Medical Officer. No one can but agree with Dr. Crichton Browne when he stated, in a letter on this subject in your last number, that the clinical clerks should be "wisely and cautiously chosen;" and I think that, if such a judicious selection of clinical clerks were made, and it were required of them that they should have previously attended a course of theoretical and clinical lectures on mental diseases, we would then materially improve the education and raise the status of those entering on asylum practice, and in the end get really good and efficient Assistant Medical Officers. Indeed I hope that ere long attendance on a course of lectures on medical psychology and mental diseases will be rendered compulsory on all medical students, for then we would have a large body of men desirous to enter on lunacy practice, which would give us a wider range for selection.

To get such good and selected men for Assistant Medical Officers, and to make it worth their while to prepare themselves in such a thorough manner for the posts, we must endeavour to make the service more attractive and to get an increase in the rate of salary and a fuller recognition and definition of their position and status as such, than what is usually accorded to them. Our claims as Assistant Medical Officers to consideration in these matters have been well and strongly advocated by you. Few Assistant Medical Officers will fail to be struck by the existing disproportion between the pay of the Medical Superintendent of an Asylum and that of an Assistant Medical Officer as compared with the duties of each, and I think that by permanently raising the salaries of the Assistant Medical Officers, the disproportion would be made less obvious, without any detriment to the Medical Superintendents. If this were done, and from £50 to £100 added to the Assistant Medical Officers' salary permanently, then one of their grievances would be removed and it would be found that on such terms they would remain for a greater length of time in one situation, as they could then afford to wait on for even a tardy promotion. As it is, if promotion does not come at an early date, good men have to retire from Lunacy and betake themselves to General Practice very frequently, and thus they are lost to us. The addition of £50 or £100 to the salary of the Assistant Medical Officer would be very much like "the needle in a bushel of wheat" in the accounts of a large Asylum, and it would, I believe, ultimately turn out to be a good and profitable investment.

I quite agree with you and Prof. Laycock, that, as defining his status and position, the term Assistant Medical Officer is objectionable. It has this objection on the face of it, that whereas the so-called Assistant Medical Officer assists the Medical Superintendent in all his duties, both administrative and medical, he only gets the credit, by his present appellation, of assisting him in his capacity as Medical Officer. I would propose therefore that in the case of one only or a Senior Assistant Medical Officer, that he receive the appellation of *Assistant Superintendent*. I prefer the terms *Assistant* to *Deputy* Superintendent (as recommended by you and Prof. Laycock), because it more fully implies and specifies the duties of the Assistant Medical Officer as he continuously assists the Medical Superintendent both in the administrative department of the Asylum and in the medical treatment and management of its inmates; for we must recollect that an officer of a lower grade may be *deputed* to assume the duties of a higher, when circumstances require it, on account of previous experience

merely, and not on account of his being actually at the time and having been for some time an officer in the lower grade, as is the case with Assistant Medical Officers in Asylums. Regarding the rule whose adoption you propose in the Rules and Regulations of all Asylums, in order to make clear and distinct to all subordinate officers what position the Assistant Medical Officer holds and what authority he can exercise in the temporary, or prolonged absence from duty of the Medical Superintendent, I think it is at present very rarely to be seen amongst the Rules and Regulations of Asylums; but in those of the Fife and Kinross District Lunatic Asylum, where I held the post of Assistant Physician for some time, there is a rule to the following effect, which pretty clearly states the position of an Assistant Physician in the absence of the Medical Superintendent. Referring to the Assistant Physician, rule 3 states that "in the absence of the Medical Superintendent—he shall perform his duties and exercise his authority over the patients and attendants." Even this is not quite explicit enough, however, for it does not mention the other subordinate officers. The rule you recommend is a very good one, but would not the following be shorter and perhaps as explicit, viz.:—The Assistant Superintendent shall in the absence of the Medical Superintendent exercise all his authority, and shall be during such absence responsible for the whole general management of the Asylum.

In conclusion, I have as an Assistant Medical Officer to heartily thank you for your kindness in taking up this most important question, and I trust that after a little further ventilation of the subject in your valuable columns we may come to some determination as to the most advisable course to be taken in order to gain what we desire. Whether or not it shall be in the form of a petition from the Assistant Medical Officers, of Asylums, in a body, to your influential and representative Association, and also to the Commissioners in Lunacy to institute enquiries into the matter and afford us weighty assistance, time will show

Enclosing my card.

I am, Gentlemen,
Yours very truly,

"AN ASSISTANT MEDICAL OFFICER TO A COUNTY ASYLUM
AND FORMERLY A RESIDENT CLINICAL CLERK."

March 9th, 1869.

Appointments.

DR. LOCKHART ROBERTSON has been elected Corresponding Member of the Medico-Psychological Association of Vienna.

SKAE, C. H., M.D., Assistant-Superintendent of the Fife and Kinross District Lunatic Asylum, has been appointed Medical Superintendent of the Ayrshire District Lunatic Asylum.

MAYHEW, Mr. C., of King's College Hospital, has been appointed Clinical Clerk at the West Riding of Yorkshire Lunatic Asylum, Wakefield, vice Aldridge, promoted.

BURMAN, J. WILKIE, M.B. Edin., L.R.C.S.E., late Resident Clinical Clerk at the West Riding Asylum, Wakefield, has been appointed Assistant Medical Officer to the Devon County Lunatic Asylum, Exminster.

LEWIS, WILLIAM BEVAN, L.R.C.P., Lond., M.R.C.S.E., L.S.A., Assistant Medical Officer to the Bucks County Lunatic Asylum, at Stone, near Aylesbury.

OBITUARY.

On the 7th March, at Littlemore, William Ley, Esq., aged 62, late Superintendent of the County Asylum, Oxford.

It is with deep regret that we record the death of Mr. Ley, who filled the office of Treasurer to the Medico-Psychological Association from 1854 to 1862. Mr. Ley was also President of the Association at the Oxford Meeting, in 1848, when the establishment of the Journal of Mental Science was resolved upon. Mr. Ley deeply felt how desirable it was that the nominal representation of this Association should be severed from a periodical, now defunct, and which, in his opinion, bore too strongly the impress of private speculation and private interests. Those familiar with Mr. Ley's single-minded love of truth and devotion to the study of Psychology will even at this distance of time realise the strong desire which urged him, in conjunction with two other members of this Association, now gone to their rest, Dr. Alexander Sutherland and Dr. Conolly, to free the Association from this possible control by the establishment of the *Journal of Mental Science*. Mr. Ley also was one of the chief advocates for placing the conduct of the new Journal in the hands of Dr. Bucknill.

In the first number of the *Journal of Mental Science*, we find the following :— “At the Oxford Meeting owing to the combined attraction of the Provincial Medical Association, and the public spirit of W. Ley, Esq., the Superintendent of the Oxfordshire Asylum, who not only exerted himself to bring the members together, but entertained them most hospitably afterwards, the attendance of asylum officers was numerous and influential. A long and interesting discussion on the best mode of establishing an Asylum Journal took place. One member alone thought that some portion of an existing journal might be made subservient to the wants of the Association. The other members expressed their conviction that a special Asylum Journal was urgently needed; that the magnitude of the interests at stake, the difficulties of asylum management and lunacy treatment, the residence of those engaged in overcoming these difficulties from each other, the impediments of personal intercourse arising from their duties, the peculiarity of those duties, and their professional experience, all made painfully evident the want of a medium of inter-communication, and a means of record of matters of practical importance in their department of science.

“Dr. Conolly added the weight of his great authority, and spoke with much emphasis of the *treasures hitherto hidden in asylum case books*, likely to become known and useful to mankind through the intervention of such a journal. The Association came to an affirmative decision *nemine contradicente*, not only on the main question of establishing an Asylum Journal, but also on the secondary one of confiding the editorial labours and responsibilities to Dr. Bucknill.”

Mr. LEY was the first Superintendent of the Asylum at Littlemore, and only resigned his post after years of ill health in 1868. His health was already sadly broken, and it was evident to his friends that even then his days were numbered. Few superintendents have left a kindlier remembrance in the minds of all than has Mr. Ley. A modest, unobtrusive man, he performed with scrupulous diligence his daily work. He was beloved by all who knew him, and probably no man holding a difficult public office made fewer enemies. His last anxious wish was fulfilled in seeing the post he vacated filled by his faithful colleague of the previous twelve years, Mr. Heurtley Sankey. The writer of this notice remembers how, suffering and in ill-health, and troubled about his own pension, Mr. Ley's chief anxiety yet was to secure to Mr. Sankey the succession which he so strongly felt to be his due.

Mr. LEY regularly attended the annual meetings of the Medico-Psychological Association, and took an unwearying interest in its work and success.

*Books, Pamphlets, &c., received for Review, 1869.**(Continued from Journal of Mental Science, January, 1869).*

Force and Nature. Attraction and Repulsion. The Radical Principles of Energy, discussed in their relations to Physical and Morphological Developments. By Charles Frederick Winslow, M.D. London: Macmillan and Co. 1869. *Will be reviewed in our next number.*

Medicine in Modern Times; or, Discourses delivered at a Meeting of the British Medical Association at Oxford. By Dr. Stokes, Dr. Acland, Professor Rolleston, Rev. Professor Haughton, and Dr. Gull, with a Report on Mercury, by Dr. Hughes Bennett. London: Macmillan and Co. 1869.

These Discourses were most carefully reviewed in the Journal of Mental Science for October, 1868. Under the title of "Medicine in Modern Times" they have been collected together and most elegantly got up by Messrs. Macmillan and Co. Doubtless many of our readers will be glad to add them to their libraries in this collected form.

St. George's Hospital Reports. Edited by John W. Ogle, M.D., F.R.C.P., and Timothy Holmes, F.R.C.S. London: John Churchill and Sons, New Burlington Street.

The Nomenclature of Diseases. Drawn up by a Joint Committee appointed by The Royal College of Physicians of London. (Subject to Decennial Revision). London: Printed for the Royal College of Physicians by W. J. and S. Goulbourn, Princes Street, Coventry Street, W. 1869.

The Old Vegetable Neurotics Hemlock, Opium, Belladonna, and Henbane; their Physiological Action and Therapeutical use alone and in combination. Being the Gulstonian Lectures for 1868, extended and including a complete Examination of the active constituents of Opium. By John Harley, M.D., Lond., F.R.C.P., F.L.S., Honorary Fellow of King's College, London; Late Assistant Physician to King's College Hospital; Assistant Physician to the London Fever Hospital. London: Macmillan and Co. 1869. *An able study of the action of the old familiar sedatives.*

On Going to Sleep. By Charles H. Moore. London: Robert Hardwick, 192, Piccadilly. 1868.

The Science of Man: A Bird's Eye View of the wide and fertile Field of Anthropology. By Charles Bray, Author of "The Philosophy of Necessity," "Force and its Medical Correlates," "The Education of the Feelings," &c., &c. London: Longmans, Green, Reader, and Dyer. 1868.

*"Tis life, whereof our nerves are scant,
Oh life, not death, for which we pant;
More life, and fuller, that I want."*

Town Life among the Poorest; the Air they Breathe and the Houses they Inhabit. By John Edward Morgan, M.A., M.D. Oxon. Fellow of the Royal College of Physicians, Physician to the Royal Manchester Infirmary, late Hon. Sec. of Manchester and Salford Sanitary Association, Author of "Danger and Deterioration of Race," &c. Paper read at the State Medicine Section of the British Medical Association, Oxford, August, 1868. London: Longmans, Green, and Co. 1869.

On the Nature and Treatment of Hereditary Disease with Reference to a Correlation of Morbific Forces. By J. M. Winn, M.D., M.R.C.P., etc. Late Resident Physician to Sussex House Lunatic Asylum, formerly Physician to the Royal Cornwall Infirmary, and to the Hampshire County Hospital, etc. London: Robert Hardwicke, 192, Piccadilly. 1869.

The Charities of London, and some Errors of their Administration: with Suggestions for an Improved System of Private and Official Charitable Relief. (Read at a Meeting of the Association for the Prevention of Pauperism and Crime in the Metropolis, in the Rooms of the Society of Arts, December 17th, 1868, the Earl of Shaftesbury, K.G., in the Chair.) By Thomas Hawksley, M.D., Lond., etc., Physician to the Infirmary for Consumption and Diseases of the Chest, Margaret Street; Author of "Matter—its Ministry to Life," "Education and Training," "Prevention of Pauperism, and Dwellings for the Working Classes," etc., etc. To be had at the Temporary Offices of the Association, 1, James Street, Adelphi, W.C.; or of the Publishers, John Churchill and Sons, New Burlington Street, London. 1869.

Eye-symptoms in Spinal Disease, with an Illustrative Case. By D. Argyll Robertson, M.D., F.R.C.S., Lecturer on Diseases of the Eye, Edinburgh. Edinburgh: Oliver and Boyd, Tweedale Court. 1869. *A careful clinical study.*

Nekrolog Nach einer Rede gehalten zur Gedenkfeier für Griesinger in der Medicinisch-Psychologischen Gesellschaft, zu Berlin, am 17. November, 1868, von Dr. C. Westphal.—*Reprint from Griesinger's Archiv für Psychiatrie.*

Rede auf W. Griesinger, am 17. November, 1868, in der Medicinisch-Psychologischen Gesellschaft zu Berlin, gehalten, von Prof. Dr. W. Lazarus: Berlin, 1869. Verlag von August Hirschwald, 68, Unter der Linden.

Wilhelm Griesinger, Biographische Skizze. Mit einem Facsimile. Leipzig, Verlag von Otto Wigand, 1869.—*Reprint from the Archiv der Heilkunde, 1869, X. 2. Heft.*

Gedenkfeier für W. Griesinger, am xiii Dezember, mdcclxviii, in Wien.—*An eloquent discourse by the Baron Mundy, M.D.*

THE MEDICO-PSYCHOLOGICAL ASSOCIATION; QUARTERLY MEETINGS.

The Third Quarterly Meeting of the Medico-Psychological Association (for scientific discussion) will be held in London on Thursday, April 29th. The following Papers will be read:—

"On some points in Cerebral Pathology," by ROBERT BOYD, M.D., Edin., F.R.C.P.

"On the Value of the Bromides in the Neuroses," by W. B. KESTEVEN, F.R.C.S.

Notice of further papers to be sent to the Secretary.

HARRINGTON TUKE,

Hon. Sec.

37, Albemarle Street, W.

March 25th, 1869.

THE JOURNAL OF MENTAL SCIENCE, JULY, 1869.

[Published by authority of the Medico-Psychological Association.]

CONTENTS.

PART I.—ORIGINAL ARTICLES.

	PAGE.
Henry Maudsley, M.D. Lond.—Emanuel Swedenborg	170
R. Boyd, M.D. Edin.—Observations on the Causes of Death in Chronic Cases of Insanity	196
W. B. Kesteven, F.R.C.S.—Remarks on the use of Bromides in the Treatment of Epilepsy and other Neuroses	205
F. Oppert, M.D.—A Visit to the Friedrichsberg Asylum	213
J. Thompson Dickson, M.A., M.B. Cantab.—Matter and Force considered in Relation to Mental and Cerebral Phenomena	217
Rev. W. G. Davies, B.D.—The Perceptive Centres and their Localisation	240
Occasional Notes of the Quarter.—International Lunacy Statistics.—English Patients in Foreign Asylums.—The Report of the New South Wales Lunacy Commission.—Dr. A. O. KELLOGG on the Non-restraint System	261—268

PART II.—REVIEWS.

The Limits of Philosophical Enquiry; Address delivered to the Members of the Edinburgh Philosophical Institution, by William, Lord Archbishop of York	269
Force and Nature; Attraction and Repulsion; The radical principle of energy discussed in relation to Physical and Morphological development, by Charles Frederick Winslow	286
On the Identity of the Vital and Cosmical Principle, by Robert Lewins, M.D.	289

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

French Psychological Literature.	291
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PART IV.—PSYCHOLOGICAL NEWS.

Proceedings at the Third Quarterly Meeting of the Medico-Psychological Association, held at the Royal Medico-Chirurgical Society, Thursday, April 29th, 1869, under the presidency of Dr. W. H. O. SANKEY.—Mr. Ley, of Littlemore.—Alleged Increase of Lunacy.—Opening of a New Chapel at the Lincolnshire County Asylum.—Glimpses of Asylum Life.—Correspondence.—Appointments.—Books received.—Obituary.—Annual General Meeting of the Medico-Psychological Association	310—336
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The Journal of Mental Science.

Original Papers, Correspondence, &c., to be sent by book post direct to Dr. ROBERTSON, Hayward's Heath, Sussex.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Haywards Heath, Sussex, or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents:—Mr. Hartmann, Leipzig; M. Borrai, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York.

Authors of Original Papers receive three extra copies of the Journal by Book-post. Should they wish for Reprints for private circulation they can have them on application to the Printer of the Journal, Mr. Bacon, Lewes, at a fixed charge of 30s. per sheet per 100 copies, including a coloured wrapper and title-page.

The copies of *The Journal of Mental Science* are regularly sent by Book post (*pre-paid*) to the ordinary Members of the Association, and to our Home and Foreign Correspondents, and Dr. Robertson will be glad to be informed of any irregularity in their receipt or overcharge in the Postage.

The following *EXCHANGE JOURNALS* have been regularly received since our last publication:—

Annales Médico-Psychologiques; *Zeitschrift für Psychiatrie;* *Vierteljahrsschrift für Psychiatrie in ihren Beziehungen zur Morphologie und Pathologie des Central Nervensystems, der physiologischen Psychologie, Statistik und gerichtlichen Medicin,* herausgegeben von Professor Dr. Max Leidesdorf und Docent Dr. Theodor Meynert; *Archiv für Psychiatrie und Nervenkrankheiten,* in Verbindung mit Dr. L. Meyer und Dr. C. Westphal, herausgegeben von Dr. W. Griesinger; *Correspondenz Blatt der deutschen Gesellschaft für Psychiatrie;* *Irren Freund;* *Journal de Médecine Mentale;* *Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali;* *Annali Frenopatici Italiani Giornale del R. Manicomio di Aversa e Della Società Frenopatica Italiana Direiti dal dott. Cav. B. G. Miraglia;* *Medizinische Jahrbücher* (Zeitschrift der K. K. Gesellschaft der Aerzte in Wien); *the Edinburgh Medical Journal;* *the American Journal of Insanity;* *the Quarterly Journal of Psychological Medicine, and Medical Jurisprudence,* edited by William A. Hammond, M.D. (New York); *the British and Foreign Medico-Chirurgical Review;* *the Journal of Anatomy and Physiology,* conducted by G. M. Humphrey, M.D., F.R.S., and Wm. Turner, M.B., F.R.S.E.; *the Dublin Quarterly Journal;* *The Liverpool Medical and Surgical Reports, October, 1868,* edited by F. T. Roberts, M.B., B. Sc., Lond., and Reginald Harrison, F.R.C.S.; *The Lancet;* *Medical Times and Gazette;* *the Medical Mirror;* *the British Medical Journal;* *the Medical Circular;* *The Practitioner,* a monthly Journal of Therapeutics, edited by F. E. Anstie, M.D., and Henry Lanson M.D.; *the Glasgow Medical Journal;* *the Journal of the Society of Arts;* *Scientific Opinion,* a monthly record of Scientific Progress at home and abroad. Also *the Morningside Mirror;* *the York Star;* *Excelsior,* or *the Murray Royal Institution Literary Gazette.*

We are compelled by want of space to defer to our number for October the conclusion of Dr. Bateman's series of papers on Aphasia.



THE JOURNAL OF MENTAL SCIENCE.

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No. 70. NEW SERIES,
No. 34.

JULY, 1869.

VOL. XV.

PART 1.—ORIGINAL ARTICLES.

Emanuel Swedenborg. By HENRY MAUDSLEY, M.D. Lond.

FEW are the readers, and we cannot boast to be of those few, who have been at the pains to toil through the many and voluminous writings of Emanuel Swedenborg. Indeed, it would not be far from the truth to say that there are very few persons who have thought it worth their while to study him at all seriously; he is commonly accounted a madman, who has had the singular fortune to persuade certain credulous persons that he was a seer. Nevertheless, whether lunatic or prophet, his character and his writings merit a serious and unbiased study. Madness, which makes its mark upon the world, and counts in its train many presumably sane people who see in it the highest wisdom, cannot justly be put aside contemptuously as undeserving a moment's grave thought. After all, there is no accident in madness; causality, not casualty, governs its appearance in the universe; and it is very far from being a good and sufficient practice to simply mark its phenomena, and straightway to pass on as if they belonged, not to an order, but to a disorder of events that called for no explanation. It is certain that there is in Swedenborg's revelations of the spiritual world a mass of absurdities sufficient to warrant the worst suspicions of his mental sanity; but, at the same time, it is not less certain that there are scattered in his writings conceptions of the highest philosophic reach, while throughout them is sensible an exalted tone of calm moral feeling which rises in many places to a real moral grandeur.

These are the qualities which have gained him his best disciples, and they are qualities too uncommon in the world to be lightly despised, in whatever company they may be exhibited. I proceed then to give some account of Swedenborg, not purposing to make any review of his multitudinous publications, or any criticism of the doctrines announced in them with a matchless self-sufficiency; the immediate design being rather to present, by the help mainly of Mr. White's book, a sketch of the life and character of the man, and thus to obtain, and to endeavour to convey, some definite notion of what he was, what he did, and what should be concluded of him.*

The first condition of fairly understanding and justly appraising any character is to know something of the stock from which it has sprung. For grapes will not grow on thorns nor figs on thistles, and if the fathers have eaten sour grapes the children's teeth will not fail to be set on edge. At the end of all the most subtle and elaborate disquisitions concerning moral freedom and responsibility, the stern fact remains that the inheritance of a man's descent weighs on him through life as a good or a bad fate. How can he escape from his ancestors? Stored up mysteriously in the nature which they transmit to him, he inherits not only the organised results of the acquisition and evolution of generations of men, but he inherits also certain individual peculiarities or proclivities which determine irresistibly the general aim of his career. While he fancies that he is steering himself and determining his course at will, his character is his destiny. The laws of hereditary transmission are charged with the destinies of mankind—of the race and of the individual.

* *Emanuel Swedenborg: His Life and Writings.* By William White. In two volumes. 1867. As the present purpose is not to make any criticism of Mr. White's laborious and useful work, we shall not again refer specially to it, although making large use of the materials which it furnishes for a study of Swedenborg; we may once for all commend it to the attention of those who are interested in obtaining an impartial account of the life and works of the prophet of the New Jerusalem. Mr. White does not appear to have formed for himself any definite theory with regard to Swedenborg's pretensions, but is apt, after having told something remarkable of him, to break out into a sort of Carlylian foam of words, which, however, when it has subsided, leaves matters much as they were. Perhaps his book is none the worse for the absence of a special theory, as we get a fair and unbiased selection from Swedenborg's conversation and writings, and a candid account of the events of his life. At the same time it will obviously be necessary, sooner or later, that the world come to a definite conclusion with regard to his character and pretensions. If man can attain to a gift of seership, and has in him the faculty of becoming what Swedenborg claimed to be, it is surely time that some exact investigation should be made of the nature of the faculty, and that he should set himself diligently to work to discover the track of so remarkable a development.

Swedenborg's grandfather was a copper smelter, of pious disposition and industrious habits, who had the fortune to become rich through a lucky mining venture. He had a large family, which he counted a blessing; for he was in the habit of saying after dinner, with a humility not perhaps entirely devoid of ostentation, "Thank you, my children, for dinner! I have dined with you, and not you with me. God has given me food for your sake." His son Jasper, the father of Emanuel Swedenborg, exhibiting in early youth a great love of books and a pleasure in playing at preaching, was educated for the ministry, in which, by zealous energy and no small worldly shrewdness, he succeeded so well that he ultimately rose to be Bishop of Skara. He was a bustling, energetic, turbulently self-conscious man, earnest and active in the work of his ministry, and a favourite of the King, Charles XI. Of a reforming temper and an aggressive character, with strongly pronounced evangelical tendencies, by no means wanting in self-confidence or self-assertion, and indefatigable in the prosecution of what he thought to be his duties, he did not fail to make enemies among those of his brethren who were unwilling to have the sleepy routine of their lives disturbed; but by the energy of his character and the favour of the king he held his own successfully. "I can scarcely believe," he says, "that anybody in Sweden has written so much as I have done; since, I think, ten carts would scarcely carry away what I have written and printed at my own expense, yet there is as much, verily, there is nearly as much, not printed." Certainly he was not less keenly careful of the things that concerned his temporal well-being than of those that belonged to his eternal welfare; and deeming himself a faithful and favoured servant of the Lord he easily traced in all the steps of his advancement the recompensing hand of his Divine Master. "It is incredible and indescribable," he exclaims, when made Dean of Upsala, "what consolation and peace are felt by the servants of the Lord when raised to a high and holy calling; and contrariwise how down-hearted they must be who experience no such elevation." Without doing any injustice to the zealous bishop, we may suppose that certain worldly advantages contributed their measure to the consolation which he felt in being raised to so high and holy a calling. By the death of his wife he was left a widower with eight children, the eldest of them not twelve years old; but he soon took to himself a second wife, distinguished for her "piety meekness, liberality to the poor," and who was moreover

"well-off, good-looking, a thrifty housewife, and had no family." She died, and within a year after her death he married for the third time, being then in his sixty-seventh year. "My circumstances and my extensive household required a faithful companion, whom God gave me in Christina Arhusia." In his choice of wives, as in other matters, he evinced his shrewd and practical character, acting apparently in accordance with the advice which he gives in a letter to his youngest son whom he was urging to apply himself to work:—"You write well, you reckon well, and, thank God, you are not married. See that you get a good wife, *and something with her.* Pray God to lead you in his holy way." The mixture of piety and worldly wisdom is very characteristic of the bishop.

His sublime self-assurance was a most striking feature in his character. Assuredly he never lacked advancement either for himself or his family through any modest distrust of his worth or any hesitation to urge his claims; he was, indeed, most pertinacious in his petitions to the king, in season and out of season; and if his prayer was left unnoticed, another was sure to follow in a short time, so that the only way of getting rid of his importunities was to grant something of what he asked. It is only just to him to add, however, that he was not less urgent in his petitions for the advantage of the church than he was in his petitions for his own advantage. So great was the faith which he had in himself and in the efficacy of his prayers that he was persuaded that he actually worked miraculous cures of disease. "There was," he says, "brought to me at Starbo a maid-servant named Kerstin, possessed with devils in mind and body. I caused her to kneel down with me and pray, and then I read over her, and she arose well and hearty and quite delivered." To this same seemingly hysterical servant, who on one occasion lay senseless and half suffocated, he called in a loud voice—"Wake up, and arise in the name of Jesus Christ!" Immediately she recovered, got up, and commenced to talk. Another of his servants had a dreadful pain in her elbow, which nothing relieved, so that for days and nights she went about moaning without rest or sleep. "At midnight she came to the room where I was lying asleep with my beloved wife, and prayed that I would for the sake of Christ take away her pain, or she must go and kill herself. I rose, touched her arm, and commanded the pain in the name of Jesus Christ, to depart, and in a moment the

one arm was as well as the other. Glory to God alone!" Not a doubt seems to have ever ruffled the serenity of his self-complacency; he had the comfortable conviction, which men of his narrow and intense type of mind sometimes get, that in all his doings the Lord was on his side. When he was nearly eighty years of age he composed his autobiography, making with his own hand six copies of it, and dedicating them "to my children and posterity as an example how to conduct themselves after my death." The grave should not quench his shining light; he was resolved, being dead, yet to speak. Of his autobiography or of any other of his cartloads of writings it is not probable that posterity will ever care to read much; the good which the restless and indefatigable bishop conferred on the world was done by his energetic and useful life; he worked well and wisely for his generation, and his generation liberally rewarded him.

Such then was Bishop Swedenborg, whose second son, Emanuel, was born on the 29th January, 1688, and was so named that he might be thereby reminded continually of "the nearness of God." Of his mother we know nothing more than what the bishop writes of her:—"Although she was the daughter of an assessor, and the wife of a rector in Upsala, and of a wealthy family, she never dressed extravagantly. As every woman in those days wore a sinful and troublesome *fontange* or top-knot, she was obliged to do as others did and wear it; but hearing that a cow in the island of Gothland had, with great labour and pitiable bellowing, brought forth a calf with a top-knot, she took her own and her girl's hoods and threw them all into the fire; and she made a vow that she and her daughters, as long as they were under her authority, should never more put such things on their heads."

The story, notwithstanding the superstition which it discovers, indicates strong self-reliance and no little force of character, but is hardly sufficient to warrant any special conclusions. As, however, Swedenborg's intellect was undoubtedly of a higher order than his father's, by nature far more subtle, comprehensive, and powerful, it is probable that he owed much to his mother's stock, as is so often the case with men of distinction. It is a small matter for anyone to have had a clever father if he has had a foolish mother. The transmission of his father's qualities of character certainly could not have been an unmixed benefit, some of them having been evidently already strained as far as was consistent with the maintenance of a sound equilibrium. A man whose

intellect moved in so narrow a current, who was possessed with such wonderful self-assurance, and who sincerely believed that he worked miraculous cures, was not unlikely to have a son in whom the exaggeration of these characters passed the limits of sanity. At any rate we may believe that the busy bishop had but little reserve power to communicate to his children, having needed and used all the force which he had for the manifold projects and works of his own active and demonstrative life: he put forth too many blossoms himself to leave much force in his stock available for the next generation. To the quiet, self-reliant, and self-denying energy of his mother's character it may well be that Swedenborg was more indebted than to the too self conscious activity of his father.

Of the events of his childhood and early youth nothing more is known than what he himself, writing in his old age, tells us:—

From my fourth to my tenth year, my thoughts were constantly engrossed in reflecting on God, on salvation, and on the spiritual affections of man. I often revealed things in my discourse which filled my parents with astonishment, and made them declare at times that certainly the angels spoke through my mouth.

From my sixth to my twelfth year, it was my greatest delight to converse with the clergy concerning faith, to whom I observed 'that charity or love is the life of faith':—

and other wonderfully precocious things.

We shall be the more apt to believe that he did discourse in that strange way, if we bear in mind that he was bred, and lived, and moved in an atmosphere of religious talk and theological discussion, where Providential interferences were not wanting. The endless praying, the catechising, the sermonising of his father, and the parental admiration which his own childish discourse excited, would tend to engender a precocity in religious matters, which failed not to bear its natural fruits in his subsequent life. From this brief glimpse into the nature of his early training, we perceive sufficient reason to conclude that the extreme self-confidence which he inherited from his father met with a fostering applause rather than a prudent discouragement. Unquestionably, if at that early age his thoughts were constantly engrossed in reflections on God, and his mouth had become an organ through which angels spoke, both his thoughts and his mouth might have been much better employed.

A notable peculiarity which he asserts to have distinguished him in his early years, and made him unlike other children, was a power of almost suspending his breathing; when deeply absorbed in prayer, he hardly seemed to breathe at all. Another remarkable characteristic of the wonderful child! On it he subsequently founded important theories concerning respiration, and his disciples look upon it as connected with the power which he claimed to have of entering the spirit world while still in the flesh. A more commonplace explanation, however, may easily suggest itself. Physicians who are accustomed to be consulted about children of nervous disposition, predisposed to epilepsy or insanity, will call to mind instances in which the little beings have fallen into trances or ecstasies, and spoken in voices seemingly not their own. On the one hand, these seizures pass by intermediate steps into attacks of chorea, and, on the other hand, they may alternate with true epileptic fits, or pass gradually into them. So far from being conditions to admire, they are of dangerous omen, and the parent whose child is so afflicted, whether it be by airs from heaven or blasts from hell, would do well to take him to some physician, in order to have the angels or devils exorcised by medical means. If Swedenborg's youthful ecstasies, as seems not improbable, were of this character, his father, who thought his hysterical maid-servant to be possessed with "devils in mind and body," was not likely to interpret them rightly; on the contrary, like Mahomet's epileptic fits, they would be counted visitations of the Deity.

Thus much, and it is unfortunately not much, concerning Swedenborg's parentage, childhood and early training. Scanty as the account is, we may see reason to trace in some events of his life the effects of the influences then exerted. I go on now to mention briefly what is known of his youth and early manhood. He was educated at the University of Upsala, where he took the degree of Doctor of Philosophy at the age of 21. Afterwards he travelled abroad in order to complete his studies, remaining some time in London, Paris, and Hamburg, wherever he went evincing an earnest thirst for knowledge, and seeking and obtaining the acquaintance of men eminent in mathematics, astronomy, and mechanics. Returning from his travels he took up his abode for some years in the little seaside university town of Griefsvalde, where he certainly was not idle. In a letter to his brother-in-law, he specifies as many as fourteen wonderful mechanical inventions on which he was engaged. Among these were:—

The construction of a sort of ship in which a man may go below the surface of the sea, and do great damage to the fleet of an enemy.

A machine, driven by fire, for pumping water, and lifting at forges, where the water has no fall.

A new construction of air-guns, by which a thousand balls may be discharged through one tube in one moment.

Schiographia universalis, or a mechanical method of delineating houses of every kind, and on any surface, by means of fire.

A mechanical chariot containing all kinds of tools, which are set in action by the movements of the horses.

A flying chariot, or the possibility of floating in the air and moving through it.

The number of projects on which he was engaged shows how great was his industry, and how fertile his ingenuity, while the character of them proves that there was no hindrance to a habit of ambitious speculation in any modest distrust of his own powers. It is evident too that at this period of his life his speculations were directed to practical ends; his daring flights were made from a basis of scientific facts, and aimed at some directly useful result; he was not yet, at any rate, a mere dreamer of inflated dreams. What, however, is particularly significant is the entire absence of self-restraint in these intellectual projects: there is no problem which he does not hold to be penetrable, and penetrable by him. To what end must such a lofty and high aspiring spirit inevitably come unless it learn by sad experience soberly to define its aims and definitely to work for them? Icarus-like in its aspiring ambition, it cannot but be Icarus-like in its disastrous fall.

In 1715, when he was 27 years old, he returned home, and received before long from the King, in compliance with his father's pertinacious prayers, the appointment of assessor in the Royal School of Mines, where, as assistant to Polhem, an eminent engineer, he was usefully employed in the practical work of his office. At the same time he did not abandon his ingenious and abstruse speculations; the results of his labours being published in numerous pamphlets, the titles of some of which will serve to indicate the nature of his studies. One is entitled "Attempts to find the Longitude by means of the Moon;" another, "On the Level of the Sea and the great Tides of the Ancient World;" another, "A Proposal for the

Division of Money and Measures so as to facilitate Calculation and Fractions." His brother-in-law Benzelius having discouraged this last scheme as impracticable and advised him to relinquish it, he replies bravely :—

It is a little discouraging to be dissuaded thus. For myself, I desire all possible novelties, aye, a novelty for every day in the year, provided the world will be pleased with them. In every age there's an abundance of persons who follow the beaten track, and remain in the old way ; but perhaps there are only from six to ten in a century, who bring forward new things, founded on argument and reason.

A novelty for every day in the year by all means, provided it be a novelty which has some solidity of foundation and a reasonable chance of bearing the test of verification. But to pursue novelties for novelty's sake, to disdain the beaten track merely because it is beaten, and to leap out of it for the purpose of shewing independence—these are things which are likely in no long time to bring a man to considerable intellectual grief. A habit of excogitating vague and hypothetical plausibilities is not difficult of acquirement, but is very detrimental to exact observation and sound reasoning. There is commonly greater profit, though attended with more pains and less pleasure, in scrutinizing and scrupulously testing one good theory than in putting forth a hundred empty hypotheses ; self-restraint being a far higher energy than self-abandonment. It is plain that Swedenborg had, to a degree which few persons have had, the power of seizing distant analogies, but it is equally plain that he put no restraint on the exercise of this faculty. No wonder that the world, unapt to welcome warmly any new doctrine, apt indeed to shut the door resolutely in its face, did not receive his wonderful discoveries with the gratitude and interest which he imagined to be their due, but, on the contrary, went on in its prosaic way serenely disregardful of them. Writing to Benzelius he complains that his brother-in-law has estranged his dear father's and mother's affections from him, and that his speculations and inventions find no patronage in Sweden.

Should I be able to collect the necessary means, I have made up my mind to go abroad and seek my fortune in mining. He must indeed be a fool, who is loose and irresolute, who sees his place abroad, yet remains in obscurity and wretchedness at home, where the

furies, Envy and Pluto, have taken up their abode, and dispose of all rewards, where all the trouble I have taken is rewarded with such shabbiness !

Again—

I have taken a little leisure this summer to put a few things on paper, which I think will be my last productions, for speculations and inventions like mine find no patronage, nor bread in Sweden, and are considered by a number of political blockheads as a sort of schoolboy exercise, which ought to stand quite in the background, while their finesse and intrigues step forward.

In what way his father's affections had shown themselves estranged we do not learn. Perhaps the bustling bishop had become impatient of his son's multitudinous speculations, and was urging him to some more practical work ; for he was not apt to look complacently on any neglect of the things that lead to worldly prosperity. To another of his sons he writes on one occasion—" See that you find some occupation where you are. It is no use to be in Sweden to fritter away your best days in idleness."

Notwithstanding the little favour which his inventions met with, Swedenborg did not carry into effect the resolution to abandon his ungrateful country ; he contented himself with a tour of fifteen months on the continent, visiting Amsterdam, Leipzig, Liege and Cologne. During this period he continued to publish numerous pamphlets, one of which was on " New Attempts to explain the Phenomena of Physics and Chemistry by Geometry," and another on " A New Method of finding the Longitude of Places on Land or at Sea by Lunar Observations." Observing as he travelled, and reflecting on what he observed, he at once published the fancies and speculations with which his prolific mind teemed ; and so serene was his self-assurance that he never seems to have doubted his capacity to deal off-hand with the most difficult subjects. Swiftly and recklessly his imagination passed to its conclusions through faint gleams of analogies, leaving deliberation and verification hopelessly in the rear, if they were ever thought of at all. He returned to Sweden in 1722, and during the next twelve years—from his thirty-fourth to his forty-sixth year—he preserved an unaccustomed silence, for he published nothing. He was, however, far from idle ; the time which was not occupied in the duties of his assessorship being devoted to study and to the composition of three big folios—the

Principia, containing an account of the creation of matter, and the *Opera Philosophica et Mineralia*. These were published at Leipzig in 1734.

In his *Principia* he professes to investigate the Elemental Kingdom, the subtle and intangible particles of which, each having its own powers of elasticity and motion, combine, as he assumes, to constitute an element. But how does he get at any knowledge of these subtle particles which he postulates? By reasoning from analogy. The method of Nature, he says, is everywhere the same; Nature is similar to herself in Suns and Planets as in Particles; size makes no difference; there is the same ratio between 1,000,000 and 5,000,000 as there is between .0,000,001 and .0,000,005; what is true of the least is true of the greatest. Now, as the whole world is mechanical these intangible particles must be so also; visible matter is geometrical as to figure, mechanical as to motion; therefore invisible matter must be so also. Then he goes on to argue in an elaborate way that everything in nature originated in a point—just as the origin of lines and forms in geometry is in points—itself somehow produced immediately from the Infinite, and that from a congress of points the First Finite was produced; from an aggregation of First Finite a grosser order of Second Finites; from these an order of Third Finites; and so on until the earth and all that therein is was produced. How he contrives to get his point produced from the Infinite, and then to start it on such a wonderful career, it is impossible to explain; his disciples who discover in some parts of these barren speculations the anticipations of important scientific discoveries, and perceive everywhere the marks of a superhuman philosophic insight, do not furnish an intelligible interpretation. This is not much to be wondered at, seeing that the master himself, when he was subsequently admitted to the Spiritual World, discovered them to be vain and idle fancies. What may justly cause surprise and regret, however, is that his followers should insist on reading a wonderful meaning into what he so entirely discarded, and persist in vaguely extolling, without definitely setting forth, the science which they find so marvellous. The fact which it chiefly concerns us here to note is his infinite self-sufficiency; there is no arrogant self-assertion, no offensive conceit, but a serene and boundless self-assurance, the like of which is seldom met with outside the walls of an asylum, but is not seldom exhibited by the monomaniac who constructs elaborate theories of the universe out of the

troubled depths of his consciousness. When a man plants himself on such a platform he is certainly likely, "whether owing to the fault or discernment of his contemporaries, to inhabit his intellectual estate unquestioned, unlimited, uncontradicted, and alone."*

The *Philosophical and Mineral Works* contain a very full description of the practical details of mining in different parts of the world; they testify how well he had observed, and how hard he had studied during his travels. He gives them the title of "Philosophical" advisedly, because it was his aim to wed philosophy to science, and to rise by steps from the investigation of the mineral to that of the organic kingdom, and through this to the study of man, and of human mind as the crowning achievement of organization.

Man did not begin to exist until the kingdoms of nature were completed, and then the world of nature concentrated itself in him at his creation. Thus in man, as in a microcosm, the whole universe may be contemplated from the beginning to the end, from first to last.

There is nothing original in this conception, which is indeed as old as thought, but if we err not, the conception of the method by which Swedenborg resolved to ascend step by step from a knowledge of the lowest forms of matter to the knowledge of its highest forms, until at last he penetrated into the secret chamber of that "noblest organization in which the soul is clad," was at that time as original as it was profoundly scientific. The grand end which he proposed to himself was the discovery of the soul; to the investigation of its nature he would mount through the different organs and functions of the body, using his knowledge of them as a ladder by which to ascend into "her secret chambers, open all the doors that lead to her, and at length contemplate the soul herself." How different in this regard from learned metaphysicians, who deem an entire ignorance of the body no bar to the most dogmatic disquisition concerning mind! Who can withhold admiration of the noble ambition of his design, of the resolute determination to undertake so vast a work, of the unflinching industry with which he set himself to execute it? It is meet that criticism stand respectfully aside for a moment, and do free homage to the philosophic genius of the mind which was capable at that time of conceiving so truly

* Dr. Garth Wilkinson's Biography of Swedenborg, p. 27.

scientific a method, and of the resolution to accomplish its application.

In pursuance of his great scheme of penetrating from the very cradle to the maturity of nature, he determined to undertake earnestly the study of anatomy and physiology, having inherited at his father's death, which took place in 1735, a sufficient fortune to enable him to follow the bent of his inclinations. Accordingly he started once more for a tour on the continent, visiting Brussels, Paris, Turin, Milan, Venice, and Rome, occupying himself in the study of anatomy, and amusing himself with visiting the theatres and operas, and seeing what was worth seeing in the different towns. For he was no ascetic, though he lived a solitary life : he was evidently not insensible to certain lusts of the flesh, nor sparing of the gratification of them ; we learn incidentally that in Italy, though he was now fifty-two years old, he kept a mistress, as indeed he had formerly done in Sweden. At a later period of his life we find him telling in his Diary how he wondered much "that I had no desire for women, as I had had all through my life," and again, "How my inclination for women, which had been my strongest passion, suddenly ceased." Very meagre, however, are the indications of the way in which he spent his time ; it would seem that he visited the dissecting rooms, if he did not himself dissect ; he certainly made himself acquainted with the works of the best anatomists, transcribing from their pages the descriptions suited to his purposes ; and in one way or another seven years were passed by him in travelling about and in physiological studies.

In 1741 he gave to the world the results of his studies and reflections in anatomy by publishing at Amsterdam his "*Economy of the Animal Kingdom*," which was followed in 1744 by his "*Animal Kingdom*." These works were the continuance of his great design in the region of organization. In them he made use of the writings of the best anatomists, selecting their descriptions as a basis of facts on which he founded his reflections.

Here and there I have taken the liberty of throwing in the results of my experience, but this only sparingly ; for on deeply considering the matter, I deemed it better to make use of the facts supplied by others. Indeed there are some that seem born for experimental observation, and endowed with a sharper insight than others, as if they possessed naturally a finer acumen ; such are Eustachius, Ruysch,

Leeuwenhoek, Lancisi, &c. There are others again who enjoy a natural faculty for contemplating facts already discovered, and eliciting their causes. Both are peculiar gifts and are seldom united in the same person. Besides I found when intently occupied in exploring the secrets of the human body that as soon as I discovered anything that had not been observed before, I began (seduced probably by self-love) to grow blind to the most acute lucubrations and researches of others, and to originate a whole series of inductive arguments from my particular discovery alone; and consequently to be incapacitated to view and comprehend, as accurately as the subject required, the idea ‘of universals in individuals, and of individuals under universals.’ I therefore laid aside my instruments, and, restraining my desire for making observations, determined rather to rely on the researches of others than to trust to my own.

Still he was not ignorant of the dangers which beset ratiocination when divorced from experience.

To a knowledge of the causes of things nothing but *experience* can guide us; for when the mind, with all the speculative force which belongs to it, is left to rove about without this guide, how prone it is to fall into error, yea into errors and errors of errors! How futile it is after this, or at any rate how precarious, to seek confirmation and support from experience! We are not to deduce experience from assumed principles, but to deduce principles themselves from experience; for in truth we are surrounded with illusive and fallacious lights, and are the more likely to fall because our very darkness counterfeits the day. When we are carried away by ratiocination alone we are somewhat like blind-folded children in their play, who, though they imagine that they are walking straightforward, yet when their eyes are unbound, plainly perceive that they have been following some roundabout path, which, if pursued, must have led them to the place the very opposite to the one intended.

Wise words! but how far Swedenborg was from realising them in practice, the perusal of a single page of his treatise will suffice to prove. His nature was too strongly bent on speculation to allow him to brook any restraint on the flights of his restless and aspiring intellect, and when experience left gaps his imagination never hesitated to fill them up with theories; the very facts indeed which he professes to record are frequently so tinged with his own hypotheses as to be made unreliable, while they are almost always too weak to bear the large conclusions which he bases upon them. One thing, however, which distinguishes him prominently from most, if not all, of those who have written upon anatomy and physiology, and which is indeed the outcome of his large

and philosophic intellect, is the clear and excellent conception which he evinces of the organism as a living social unity formed by the integration of manifold orderly disposed parts ; he does not treat of the body as if it were a mere mechanism or carcass of muscle, bone, and nerve, to be carefully observed, dissected, and described or figured, nor does he deal with the functions of any organ as if this were an independent agent and had little or no concern or relation with other organs and with the whole life of the being, but throughout his treatise he grasps the idea of a vital harmony, exhibits the essential interdependence, the orderly subordination and co-ordination of parts, and brings us face to face with a *living organization*. To him there is no manifestation of the bodily life, however seemingly humble, which has not its deep meaning ; everything which is outwardly displayed is symbolical of what exists in the innermost. It plainly appears that his science of the bodily organism, fanciful as it often seems, is animated with conceptions derived from the social organization ; and although the latter is a later, higher and more complex human evolution than the bodily organization, it is certain that ideas obtained in its sphere may be profitably applied to the study of the life of the body. If in one wonderful flash of self-consciousness the intimate functions and relations of every part of the body, and their integration in the unity of the *ego*, were miraculously declared, who can tell, nay who can imagine, what a flood of light would be suddenly thrown upon the social relations of man ?

It would be unprofitable to attempt to give here a summary of Swedenborg's physiological views ; indeed it would be impossible to make an abridgement of them ; among numerous wild conjectures, fanciful theories, strange conceits and empty phrases, there are many pregnant suggestions, gleams of the most subtle insight, and far reaching analogies illuminating the dry details with light from a higher sphere. Indeed, when he has gone astray, it might sometimes be justly said of him that "the light which led him astray was light from heaven." Doubtless it is an admiration of this higher intellectual light which has inspired Emerson's extraordinary estimate of his genius. He speaks of him as one who " seemed by the variety and amount of his powers to be a composition of several persons—like the giant fruits which are matured in gardens by the union of four or five single blossoms ;" " who anticipated much science of the nineteenth century ; anticipated in astronomy the dis-

covery of the seventh planet; anticipated the views of modern astronomy in regard to the generation of the earth by the sun; in magnetism, some important conclusions of later students; in chemistry, the atomic theory; in anatomy, the discoveries of Schlichting, Munro, and Wilson; and first demonstrated the office of the lungs."

"A colossal soul, he lies abroad on his times, uncomprehended by them, and requires a long focal distance to be seen; suggests, as Aristotle, Bacon, Selden, Humboldt, that a certain vastness of learning, or *quasi* omniprescence of the human soul in nature is possible. . . . One of the mastodons of literature, he is not to be measured by whole colleges of ordinary scholars. His stalwart presence would flutter the gowns of a university. Our books are false by being fragmentary; their sentences are *bon mots*, and not parts of natural discourse, or childish expressions of surprise and pleasure in nature. But Swedenborg is systematic, and respective of the world in every sentence: all the means are orderly given; his faculties work with astronomic punctuality; and his admirable writing is pure from all pertness or egotism."

These must appear strange and startling assertions to those who have considered deeply the slow and tedious course of scientific discovery, and they would be more strange if they were true; but the sober fact is that there is scarcely a shadow of reason for attributing to him any of these wonderful discoveries. He speculated largely and vaguely about magnetism, chemistry, astronomy, anatomy, as he did about everything else, and expressed what he thought with an unequalled self-sufficiency, but if his speculations in these sciences be compared with such exact knowledge of them as existed at the time, his information will be found to be superficial and defective, his speculations for the most part crude, barren, and fanciful. In regard of this question it should be born in mind that Swedenborg did not live and flourish in the thirteenth but in the eighteenth century—that he was contemporary with Newton and Halley in science, with Berkeley, Hume, and Kant in philosophy. It is really only by throwing him back, as it were, into the dark ages, by ignoring the intellectual development of his time, and looking on his writings as the Mussulman looks on his Koran, that it is excusable to break out into any admiration of his positive scientific acquirements. That the world received his publications with indifference was the natural and just con-

sequence of their character; it would indeed have been remarkable if men seriously engaged in scientific work had thought it worth while to examine and controvert his fanciful opinions. Vain and futile too would the attempt assuredly have been if it had been made, for sober inquiry could not meet on a common platform with imagination run riot, and self-confidence incapable of doubt.

It would be useless then to attempt to convey an adequate notion of the matter of Swedenborg's writings; it must suffice here to note their intellectual character. Undoubtedly he possessed in a remarkable degree some of the elements of greatness which have existed in the greatest men: a wonderful originality of conception; a mind not subjugated by details and formulas, but able to rise above the trammels of habits and systems of thought; an extraordinary faculty of assimilation; a vast power of grasping analogies; a sincere love of knowledge; an unwearied industry, and a matchless daring. Having all these qualities, but entirely lacking intellectual self-restraint, he is scientifically as sounding brass or a tinkling cymbal: his originality unchecked degenerated into riotous fancy; his power of rising above systems passed into a disregard or disdain of patiently acquired facts; though his industry was immense, he never more than half learned what he applied himself to, never patiently and faithfully assimilated the details of what was known, but, seduced by his love of analogies and sustained by his boundless self-sufficiency, he was carried away into empty theories and groundless speculations. He was unwisely impatient of doubt, constitutionally impatient of intellectual self-control. His writings, though containing many truths excellently illustrated, and passages of great pregnancy and eloquence, are diffuse, and very tedious to read; they have neither beginning nor end, are full of repetitions, inconsistencies and even contradictions. His admirers may see in such contradictions the evidence of a persevering and single-minded pursuit of truth, by reason of which he scrupled not to abandon an opinion so soon as he discovered a wider horizon, but it is plainly also possible to discern in them the evidence of an ill-balanced intellect drifting from all real anchorage in observation and experience. Towards the end of the "Principia" he says:—"In writing the present work I have had no aim at the applause of the learned world, nor at the acquisition of a name or popularity.

To me it is a matter of indifference whether I win the favourable opinion of everyone or of no one, whether I gain much or no commendation; such things are not objects of regard to one whose mind is bent on truth and on true philosophy; should I, therefore, gain the assent or approbation of others I shall receive it only as a confirmation of my having pursued the truth. . . . Should I fail to gain the assent of those whose minds, being prepossessed by other principles, can no longer exercise an impartial judgment, still I shall have those with me who are able to distinguish the true from the untrue, if not in the present, at least in some future age."

That he was sincere in this declaration is proved by the calm, passionless tone of his writings, and by the steady, unruffled pursuit of his own line of thought in so many fields of labour. But no man is self-sufficing in this universe, and it is an irremediable misfortune to him when he imagines that he is. A due regard to the views and opinions of others is not merely useful, but it is indispensable to a sound intellectual development; these furnish a searching text whereby true theories are separated from those which are false, the former ultimately verified and accepted, and the latter rejected. Truth is not born with any one man, nor will it die with him; its progress resting on the development of the race in which the greatest of individuals has but a very small part. To profess an entire indifference to the opinions of contemporaries is not therefore a mark of wisdom but an indication either of foolish pretence, or of inordinate vanity, or of downright madness, and shows a pitiful ambition in him who makes such a declaration. How many defective theories have been promulgated, how much labour has been vainly spent, because scientific inquirers have not always set themselves conscientiously to work to learn what has been done by others before they began their studies, and how their results stand in relation to well-established truths. The monomaniac who industriously wastes his ingenuity in the construction of a machine which shall be capable of perpetual motion is, in his own estimation, a most earnest pursuer of truth, and at all events has a most sincere indifference to the criticisms of others. In all the world who more original than he?

While we are constrained then to pronounce Swedenborg's treatment of scientific subjects often shallow, vague and fanciful, and for the most part barren of exact knowledge and sound principles, it must be allowed that it is character-

ized by a comprehensive grandeur of method,—a method informed throughout with the truth which Bacon earnestly insisted on, that all partitions of knowledge should be accepted rather “for lines to mark and distinguish than for sections to divide and separate, so that the continuance and entirety of knowledge be preserved.” He drew large and inspiring draughts from the common fountain of all sciences—the *philosophia prima*, tracing with subtle insight “the same footsteps of nature treading or printing upon several subjects or matters.” Hence his works are profitable for instruction and correction to all men who are engaged in special branches of scientific research, and whose minds are apt to be fettered by the methods and formulas to which their special science has been reduced, and according to which they have studied and worked; who have, as Bacon says, “abandoned universality, or *philosophia prima*. For no perfect discovery can be made upon a flat or level: neither is it possible to discover the more remote and deeper parts of any science, if you stand but on a level of the same science, and ascend not to a higher science.” Beyond the principles of each science there is a philosophy of the sciences; beyond the artificial and sometimes ill-starred divisions which men for the sake of convenience make, there is a unity of nature. The principles of one science, fully comprehended, are a key to the interpretation of all sciences; they are the same footsteps of nature treading upon several subjects. How mischievously has the human mind been enslaved by the fetters which itself has forged! Is not the most exalted imagery of the true poet fundamentally the highest science? And shall not a philosophy of science be found the highest poetry?

We must now pass to a period of Swedenborg’s life when a great change took place in his views, his work, and his pretensions. Hitherto his speculations had preserved a scientific semblance; they had been made from some basis of facts and had evinced some practical tendency, although the speculations went on increasing out of proportion to the facts until these became little more than the occasions of theories. Now he abandoned the ground of experience entirely, and entered the spiritual world. His subsequent career as seer and theologian was the natural development of his character, but it was a morbid development; and the history which remains to be told is the history of a learned and ingenious madman, the character of whose intellectual

aberration testifies to the greatness of his original intellectual structure.

The manner of the great change by which Swedenborg imagined that his eyes were opened to discern what passed in the world of spirits, and he was chosen by God to unfold the spiritual sense of the Holy Scriptures, was in this wise. One night in London after he had dined heartily a kind of mist spread before his eyes, and the floor of his room was covered with hideous reptiles such as serpents, toads and the like. "I was astonished, having all my wits about me, and being perfectly conscious. The darkness attained its height and then passed away. I now saw a man sitting in the corner of the chamber. As I had thought myself entirely alone, I was greatly frightened when he said to me, 'Eat not so much.' My sight again became dim, but when I recovered it I found myself alone in the room."

The following night the same thing occurred.

"I was this time not at all alarmed. The man said, 'I am God, the Lord, the Creator and Redeemer of the world. I have chosen thee to unfold to men the spiritual sense of the Holy Scripture. I will myself dictate to thee what thou shalt write.'"

Thenceforth he abandoned all worldly learning and laboured only in spiritual things; the Lord had opened the eyes of his spirit to see in perfect wakefulness what was going on in the other world, and to converse, broad awake, with angels and spirits. Such is his description of the vision in which the scales fell from his eyes and he was called, like the Apostle of the Gentiles, to a new and spiritual mission. What will the ordinary reader say of it? Without doubt one of two things: either that it was a nightmare engendered by indigestion following too heavy a meal, or that it was the hallucination of a disordered brain. The former might seem a probable and sufficient explanation were it not for some important information which exists with regard to Swedenborg's mental condition at the time. In 1858 a Diary kept by him between 1743 and 1744 was discovered, and purchased for the Royal Library at Stockholm. It contains tedious and wearisome records of the dreams which he dreamed night after night, and the spiritual interpretations which he gave to them. They are of all sorts, running through the gamut from the lowest note of despair to the highest pitch of exaltation; some are ecstatic visions of bliss in which he feels himself in

heaven ; others are distressing visions of temptations, persecutions and sufferings ; while others are filthy details of obscenities. The following dream occurred in the night between the 6th and 7th April, 1744 :—

I went to bed . . . Half an hour after I heard a tumbling noise under my head. I thought it was the Tempter going away. Immediately a violent trembling came over me from head to foot with a great noise. This happened several times. I felt as if something holy were over me. I then fell asleep, and about 12, 1 or 2 the tremblings and the noise were repeated indescribably. I was prostrated on my face, and at that moment I became wide awake and perceived that I was thrown down, and wondered what was the meaning. I spoke as if awake, but felt that these words were put into my mouth—

‘Thou Almighty Jesus Christ, who by Thy great mercy deigns to come to so great a sinner, make me worthy of Thy grace.’

I kept my hands together in prayer, and then a hand came forward and firmly pressed mine. I continued my prayer, saying—

‘Thou has promised to have mercy upon all sinners ; Thou canst not but keep Thy word.’

At that moment I sat in His bosom, and saw Him face to face. It was a face of holy mien and altogether indescribable, and He smiled so that I believe His face had indeed been like this when he lived on earth. . . .

So I concluded it was the Son of God Himself, who came down with the noise like thunder, who prostrated me on the ground, and who called forth the prayer.”

It is plain that he was afflicted with such painfully vivid and intensely real dreams as occur when the reason is beginning to totter, and when it is impossible to distinguish between dreaming and waking consciousness. “I was the whole night, nearly eleven hours,” he says on one occasion, “neither asleep nor awake, in a curious trance.” Every one must have experienced at some time or another what Spinoza long ago observed, that the scenes of a dream may persist for a time as hallucinations after awakening, and produce a feeling of helplessness or even terror. When the nervous system is prostrated and the threatenings of mental disorder declare themselves, these half-waking hallucinations acquire a distressing reality, and not unfrequently, a disgusting or appalling character. While dreams may be considered a temporary insanity, insanity is a waking dream, and there is a border land in which they are so confounded as to be indistinguishable. This confusion is abundantly exemplified in the records of Swedenborg’s dreams and visions at this time.

I had horrible dreams : how an executioner roasted the heads which he had struck off, and hid them one after another in an oven, which was never filled. It was said to be food. He was a big woman who laughed, and had a little girl with her.

Horrible and impious thoughts often caused him agonies of suffering :—

I had troublesome dreams about dogs, that were said to be my countrymen, and which sucked my neck without biting. . . . In the morning I had horrid thoughts, that the Evil One had got hold of me, yet with the confidence that he was outside of me and would let me go. Then I fell into the most damnable thoughts, the worst that could be.

He is persecuted with sensual dreams on many occasions :—

April 26 and 27.—I had a pleasant sleep for eleven hours, with various representations. A married woman persecuted me, but I escaped. It signifies, that the Lord saves me from persecution and temptation.

A married woman desired to possess me, but I preferred an unmarried. She was angry and chased me, but I got hold of the one I liked. I was with her, and loved her: perhaps it signifies my thoughts.

Some of the entries which follow, made in the month of May, are of a very mysterious character; and how much of what they relate may be vision and how much reality, it is impossible to say :—

On the 20th I intended going to the Lord's Supper in the Swedish Church, but, just before I had fallen into many corrupt thoughts, and my body is in continuous rebellion, which was also represented to me by froth, which had to be wiped away. . . .

I nevertheless could not refrain from going after women, though not with the intention of committing acts, especially as in my dreams I saw it was so much against the law of God. I went to certain places with Professor Ohlreck. . . . In one day I was twice in danger of my life, so that if God had not been my protector I should have lost my life. The particulars I refrain from describing.

Certain passages in the Diary are of such a character as to be quite unfit for publication, or suitable only for publication in a medical journal; and they are omitted therefore by his biographer.

A person may of course dream extraordinary dreams, and keep a record of them, without justly incurring the suspicion of any mental derangement. The notable circumstances in connexion with Swedenborg's dreamings are the indistinguishable blending of dreams and waking visions, and the entire faith with which he accepts and interprets them as spiritual revelations. As a peculiarly endowed being having gifts which no other man had, and the mission to proclaim the church of a New Jerusalem, which he believed himself to have, he looked upon the wildest and most obscene of his dreams as of mighty spiritual significance: even in the dirtiest details of an unchaste dream he discovers a wonderful spiritual meaning. Had it not been for this spiritual interpretation of his dreams and visions, probably no one would ever have doubted the derangement of his intellect. But what is there which, coming in the name or guise of the spiritual, some persons will not be found to accept? Those, however, who reject angrily the supposition of any unsoundness of mind must admit, if they know anything of its morbid phenomena, that if he was not at this time fast gliding into madness he imitated exceeding well the character of the incipient stages. But there is no need of conjecture where something like certainty is attainable.

At this period there occurs a break of three weeks in the Diary, the interruption corresponding with what appears to have been a positive attack of acute mania. He was lodging at the house of a person named Brockmer in Fetter Lane, who, twenty-four years afterwards, related the following story to Mathesius, a Swedish clergyman, by whom he was questioned on this subject:—

Brockmer's Narrative.

In the year 1744, one of the Moravian Brethren, named Seniff, made acquaintance with Mr. Emanuel Swedenborg while they were passengers in a post-yacht from Holland to England. Mr. Swedenborg, who was a God-fearing man, wished to be directed to some house in London, where he might live quietly and economically. Mr. Seniff brought him to me, and I cheerfully took him in.

Mr. Swedenborg behaved very properly in my house. Every Sunday he went to the church of the Moravian Brothers in Fetter Lane. He kept solitary, yet came often to me, and in talking expressed much pleasure in hearing the gospel in London. So he continued for several months approving of what he heard at the chapel.

One day he said to me he was glad the gospel was preached to the poor, but complained of the learned and rich who, he thought, must go to hell. Under this idea he continued several months. He told me he was writing a small Latin book, which would be gratuitously distributed among the learned men in the Universities of England.

After this he did not open the door of his chamber for two days, nor allow the maid-servant to make the bed and dust as usual.

One evening when I was in a coffee-house, the maid ran in to call me home, saying, that something strange must have happened to Mr. Swedenborg. She had several times knocked at his door without his answering, or opening it.

Upon this I went home, and knocked at his door, and called him by name. He then jumped out of bed, and I asked him if he would not allow the servant to enter and make his bed? He answered "No," and desired to be left alone, for he had a great work on hand.

This was about nine in the evening. Leaving his door and going upstairs, he rushed up after me, making a fearful appearance. His hair stood upright, and he foamed round the mouth. He tried to speak, but could not utter his thoughts, stammering long before he could get out a word.

At last he said, that he had something to confide to me privately, namely, that he was Messiah, that he was come to be crucified for the Jews, and that I (since he spoke with difficulty), should be his spokesman, and go with him to-morrow to the synagogue, there to preach his words.

He continued 'I know you are an honest man, for I am sure you love the Lord, but I fear you believe me not.'

I now began to be afraid, and considered a long time ere I replied. At last, I said,

'You are Mr. Swedenborg, a somewhat aged man, and, as you tell me, have never taken medicine; wherefore I think some of a right sort would do you good. Dr. Smith is near, he is your friend and mine, let us go to him, and he will give you something fitted for your state. Yet I shall make this bargain with you, if the Angel appears to me and delivers the message you mention, I shall obey the same. If not, you shall go with me to Dr. Smith in the morning.'

He told me several times the angel would appear to me, whereupon we took leave of each other and went to bed.

In expectation of the angel I could not sleep, but lay awake the whole night. My wife and children were at the same time very ill, which increased my anxiety. I rose about five o'clock in the morning.

As soon as Mr. Swedenborg heard me move overhead he jumped out of bed, threw on a gown, and ran in the greatest haste up to me, with his night-cap half on his head, to receive the news about my call.

I tried by several remarks to prepare his excited mind for my answer. He foamed again and again, 'But how—how—how?' Then

I reminded him of our agreement to go to Dr. Smith. At this he asked me straight down, 'Came not the vision?' I answered, 'No; and now I suppose you will go with me to Dr. Smith.' He replied, 'I will not go to any doctor.'

He then spoke a long while to himself. At last he said, 'I am now associating with two spirits, one on the right hand and the other on the left. One asks me to follow you, for you are a good fellow; the other says I ought to have nothing to do with you because you are good for nothing.'

I answered, 'Believe neither of them, but let us thank God, who has given us power to believe in His Word.'

He then went down stairs to his room, but returned immediately, and spoke; but so confusedly that he could not be understood. I began to be frightened, suspecting that he might have a penknife or other instrument to hurt me. In my fear I addressed him seriously, requesting him to walk down stairs, as he had no business in my room.

Then Mr. Swedenborg sat down in a chair and wept like a child, and said, 'Do you believe that I will do you any harm?' I also began to weep. It commenced to rain very hard.

After this I dressed. When I came down I found Mr. Swedenborg also dressed, sitting in an arm-chair with a great stick in his hand and the door open. He called, 'Come in, come in,' and waved the stick. I wanted to get a coach, but Mr. Swedenborg would not accompany me.

I then went to Dr. Smith. Mr. Swedenborg went to the Swedish Envoy, but was not admitted, it being post-day. Departing thence he pulled off his clothes and rolled himself in very deep mud in a gutter. Then he distributed money from his pockets among the crowd which had gathered.

In this state some of the footmen of the Swedish Envoy chanced to see him and brought him to me very foul with dirt. I told him that a good quarter had been taken for him near Dr. Smith, and asked him if he was willing to live there. He answered, 'Yes.'

I sent for a coach, but Mr. Swedenborg would walk, and with the help of two men he reached his new lodging.

Arrived there, he asked for a tub of water and six towels, and entering one of the inner rooms, locked the door, and spite of all entreaties would not open it. In fear lest he should hurt himself the door was forced, when he was discovered washing his feet and the towels all wet. He asked for six more. I then went home, and left six men as guards over him. Dr. Smith visited him, and administered some medicine, which did him much good.

I went to the Swedish Envoy, told him what had happened, and required that Mr. Swedenborg's rooms, in my house, might be sealed. The Envoy was infinitely pleased with my kindness to Mr. Swedenborg, thanked me very much for all my trouble; and assured me that

the sealing of Mr. Swedenborg's chamber was unnecessary as he had heard well of me, and had in me perfect confidence.

After this I continued to visit Mr. Swedenborg, who at last had only one keeper. He many times avowed his gratitude for the trouble I had with him. He would never leave the tenet, however, that he was Messiah.

One day when Dr. Smith had given him a laxative, he went out into the fields and ran about so fast that his keeper could not follow him. Mr. Swedenborg sat down on a stile and laughed. When his man came near him, he rose and ran to another stile and so on.

When the dog-days began, he became worse and worse. Afterwards I associated very little with him. Now and then we met in the streets, and I always found he retained his former opinion.

Mathesius adjoins to his copy this testimony—

The above account was word by word delivered to me by Mr. Brockmer, an honest and trustworthy man, in the house and presence of Mr. Burgman, minister of the German Church, the Savoy, London, while Swedenborg lived.

ARON MATHESIUS.

Stora Hallfara, 27th August, 1796.

Here then is a well authenticated narrative of an outbreak of acute insanity such as any medical psychologist, acquainted with what had gone before, might have almost ventured to predict. Some of Swedenborg's admirers have tried eagerly but vainly to impugn the veracity of Brockmer's story, as related by Mathesius; it was not only confirmed by other enquirers, but it accords singularly with the revelations which Swedenborg makes of his mental state in the Diary, and it assuredly bears in its circumstances the evidence of truth. Admitted, as it must be, to be true in its main features, there remains no doubt that Swedenborg was insane at the time when he claimed to have been first admitted to intercourse with the spiritual world. After the acute attack had passed off, as it did in a few weeks, was he perfectly restored, or was he still the victim of a chronic mania or monomania, such as not unfrequently follows acute madness? There were two circumstances in this case which would have prevented an experienced physician from looking forward with hope to an entire recovery. The first was the age of the patient, for Swedenborg was at the time fifty-six years old; and the second was that his madness was not a strange calamity coming on him unexpectedly from without, foreign to his

nature, extrinsic, but that it was native to his character, the result of an unsound development of its tendencies—it was a natural, an intrinsic madness. In the former case the *ego* regaining power, may throw off the intruding affliction and re-establish itself; in the latter, the mania absorbs and becomes the *ego*, wherefore no return to entire sanity is possible. It was not then scientifically probable that Swedenborg would recover; it was, on the contrary, probable that he would suffer for the rest of his life from the monomaniacal form of chronic mania. The few records in his Diary which occur after his acute attack tend to confirm the presumption of a continued derangement.

Thus:—

July 1 and 2.—There happened to me something very curious. I came into violent shudderings, as when Christ showed me his Divine mercy. The one fit followed the other ten or fifteen times. I expected to be thrown on my face as before, but this did not occur. At last, trembling, I was lifted up, and with my hands I felt a (human) back. I felt with my hands all along the back, and then the breast. Immediately it lay down, and I saw in front the countenance also, but very obscurely. I was then kneeling, and I thought to myself whether or not I should lay myself down beside it, but this I did not, for it seemed as if not permitted.

The shudderings came all from the lower parts of my body up to my head. This was in a vision when I was neither waking nor sleeping, for I had all my thoughts about me. It was the inward man separated from the outward that was made aware of this.

What then are the conclusions, broadly stated, which we may hold to be thus far established? That in the year 1744 or 1745 Swedenborg suddenly abandoned all his former pursuits and interests; that he claimed to have been then admitted to the spiritual world and to have the power of talking with angels; that coincidently with this great change and new mission he was writing what an unprejudiced person must affirm to be the product of madness; and, lastly, that he had undoubtedly an acute attack of madness. Is it not reasonable to infer that his new and strange pretensions were the outcome of his madness? Not so, his disciples may perhaps say; for throughout his previous career he had been gradually rising from the earthly to the spiritual; he had mounted step by step from the study of the lowest forms of matter to the investigation of its highest organic evolution; and his new mission was the bright and blessed development,

the glorious inflorescence, of a consistent life. No question that it was the natural evolution of his previous intellectual career: a self-sufficiency knowing no bounds had risen to the preposterous pretensions of monomania, and an imagination habitually running riot had at last run mad. To live a life of complete seclusion, to pursue contentedly an individual line of thought, isolated from communion with men, estranged from their doings and interests, is nowise the way to preserve a sound mental equilibrium; it is indeed the sure way to engender a morbid style of thought and feeling, to lead to a moral or intellectual monomania. Speculative philosophers, impracticable theorists, self-inspired prophets, and other able men unhappily insulated by undue self-esteem, may retire to the solitude of their chambers, and launch forth their systems, their theories, their denunciations, or their scorn, but the greatest men, who have preserved a healthy tone of mind and displayed the highest intellectual energy, have not separated themselves from other men, but have lived in sympathy with them, and have moved and had their being among them. As outward expression of idea is essential to its clearness of conception, so a life of action is essential to the highest life of thought. It is in the social as it is in the bodily organism: the surrounding elements of the structure ever exert a beneficial controlling influence on any element which has taken on an excessive individual action; and if this escape from such modifying influence, its energy runs into disease, and it becomes an excrescence.

(*To be continued.*)

Observations on the causes of death in Chronic cases of Insanity.
By R. BOYD, M.D. Edin., F.R.C.P.

(*Read at the Third Quarterly Meeting of the Medico-Psychological Association,
held at the Royal Medico-Chirurgical Society, April 29, 1869.*)

As the necessity of providing accommodation for chronic cases of insanity in lunatic asylums, as well as for the aged and infirm, or chronic, cases in workhouses, is becoming more and more urgent, and is engrossing the attention of those concerned in the relief of the poor at the present time, it occurred to me, that enquiry into the causes of death amongst

chronic cases of the insane might be a very fit subject to bring before the members of this association.

Owing to the illiberal provision made for cases of accident or sickness under the Poor Law, compared to the very liberal provision for the insane poor under the Lunacy Laws, for several years past county asylums have not been strictly confined to the reception of the insane, but have also been much used as infirmaries to workhouses, from the number of paralytics, fatuous persons, and those suffering from temporary delirium from physical causes, very frequently sent to the asylum who should be cared for at the workhouse. This has been more recently the case since the expense of maintenance of paupers has been transferred from the parish to the common fund of the union, and has consequently contributed in no small degree to the increased numbers in asylums.

The great additional accommodation provided, and the reports published of the annually increasing numbers in pauper asylums, would lead persons unacquainted with these circumstances to believe that there was an enormous increase in the numbers of the insane poor in England, which in reality may not be the case, taking into account that a very considerable number of those returned as lunatics are paralytics or aged persons in a state of fatuity, removed to asylums from workhouses and elsewhere. Instances could be given of octogenarians being sent as dangerous lunatics to the county asylum, the existing state of the laws facilitating, if not rendering necessary, such removals, and improperly placing on the roll of pauper lunatics aged and fatuous persons.

It has been calculated that about 27 per cent. of the cases in the asylum for the County Somerset are of a quiet and harmless class, that might be as well treated in the workhouse, if a sufficient dietary and paid nurses were there provided. By the removal of such chronic and incurable cases, the asylum would be more manageable, from the decrease in numbers, and better circumstanced as an hospital for the treatment of acute cases. The curable cases are about 17 per cent; the incurable sick and infirm form the remainder, about 56 per cent.

We are all aware how difficult it is to define insanity; can it then be wondered at, that under two such different laws in the treatment of the patient, every case that can be sent, is sent, from the workhouse to the asylum?

As the connection between the chronic cases in asylums and in workhouses is, from the circumstances here stated,

more intimate than many persons might at first be disposed to admit, the observations I have to offer regarding the diseases of chronic cases in the asylum may be to a considerable extent applied to those in the workhouse also.

Medical superintendents might furnish, from the records of some of the older asylums, information of much value at the present time. It is a question whether large institutions are best adapted for the class of cases to be provided for; their advantages in an economical point of view seem to be very doubtful, and if they are wanting in that respect, their advantages in other ways are still more doubtful. In another point, the difficulty of heating, lighting, and ventilation, is greater and more expensive (comparatively) in large than in small buildings. It has been long the opinion of some experienced physicians that asylum and hospital life have a tendency to produce in patients long resident, tubercular disease of the lungs, from inhaling, especially in those affected with tuberculous disease, over and over again the breath of others; the opinion is also becoming more prevalent that the removal of patients to hospitals and infirmaries diminishes their chances of recovery. This opinion I formed many years ago from the statistics of the diseases of the indoor and outdoor poor of the parish of St. Mary-le-bone, and no doubt the psychical effect of the removal of patients from their homes to an infirmary, in the midst of sickness and strange nurse-tenders, depresses and counterbalances the advantages of superior cleanliness, better attendance, and the good food provided in public institutions. The erection of temporary hospitals for the reception of persons suffering from contagious or epidemic diseases, is necessary, and now recommended in preference to permanent and expensive buildings for such cases. In small towns and villages in populous districts cottage hospitals for the reception of accidents, &c., have gradually been increasing in public favor.

As I am not aware that any data have been published for or against the opinion that continued residence in an asylum has a tendency to produce tubercular disease of the lungs, I ascertained by *post mortem* examination the cause of death in the chronic cases examined in the Somerset County Asylum during the twenty years of my residence there. The numbers of each sex are distinguished, the form of the disorder, the state of bodily health on admission, the assigned cause of death, distinguishing tubercular disease of the lungs from inflamma-

story disease of the lungs, besides other causes, including cerebral and abdominal disease, taking three periods of life and giving the per centages.

From the 1st March, 1848, to the 1st March, 1868, there were 3284 patients admitted; 1649 males, and 1635 females. Reduced to a per centage these results stand thus:—

The recoveries	42· per cent.
The numbers discharged relieved . . .	8·6 do.
Do. do. not improved	4·5 do.
Do. who died	28·6 do.
Do. remaining in asylum . .	16·3 do.
<hr/>	
	100·0

There was an excess of nearly five per cent. of the recoveries in the females, during that long period, their recoveries amounting to 44·3, and that of the males to 39·4 per cent.; and an excess of nearly two per cent. of the females of those relieved, the ratio discharged relieved being 9·4 for females, and 7·8 per cent. for males. In those discharged not improved, the ratio was greatest for males, being 5·7, and for females 3·4 per cent., and for those who died, there was an excess of $8\frac{1}{2}$ per cent. in the males, the ratio for them being 32·9, and for females 24·4 per cent. Those remaining in the asylum at the end of the period of twenty years amounted to 14·2 per cent. of the male, and 18·5 per cent. of the female admissions. On the 1st March, 1868, there were still in the asylum, 43 patients—24 males and 19 females, of those admitted twenty years previously, in 1848; the number of admissions was greater that year than in any succeeding one, being for the most part transfers from licensed houses, where they had previously been under care.

Up to the year 1864 the average admissions to the asylum were 155 annually, in that year the admissions amounted to 217 and since then the average has been about 200 annually. Accommodation is now provided in the asylum for about 700, just double the number for which it was originally built.

Of 938 deaths, 542 males and 396 females, 336 were chronic cases, of 2 years residence and upwards, and of these, in about one third, the assigned cause of death was from tubercular disease of the lungs. The proportion of deaths from this

particular disease was much greater in females, amounting to nearly 41 per cent., and to 25 per cent. only in males.

Of the 336 chronic cases, 185 were of from 2 to 5 years residence, of these 102 being males and 83 females ; 151 were of 5 years residence and upwards, 70 of these being males and 81 females.

Tubercular disease of the lungs was the assigned cause of death in 27 males and 31 females, or 31·4 per cent. of the 185 cases of from 2 to 5 years residence in the asylum, and in 16 males and 36 females, or 34·5 per cent of the 151 cases of from 5 years residence and upwards, shewing an excess of 3 per cent. in those the longest resident.

Many of the cases in which tubercular disease was put down as the assigned cause of death were complicated with bronchitis, pneumonia, pleurisy, and a few with gangrene of a portion of lung, also with ulceration of intestines, oedema, anasarca, and often with opacity of the cerebral membranes and fluid in the ventricles, chronic meningitis and cerebritis.

Tubercular disease of the lungs or pulmonary phthisis has been fatal in nearly a third of the chronic cases ; less than a fifth of the English adult population fall victims to this disease, so that its greater fatality in chronic cases of insanity must be due to some cause or causes still to be investigated.

In 1866, the deaths from all causes in England were in male adults of 20 years and upwards 126,235, and of these, 22,918, or 10·2 per cent., died from tubercular disease. In female adults of 20 years and upwards the total deaths were 128,359, and of these 22,749, or 17·7 per cent., died from tubercular disease.

There was never any epidemic at the Somerset County Asylum, and the health of the patients was generally as good as in any other similar institution, but it must be admitted that post mortem examinations often reveal diseases of the lungs which have never been suspected.

However we regard the fact, whether from the numbers collected, or from insanity being more prevalent amongst phthisical patients than others, or from both causes, the mortality from tubercular disease was about double, amongst chronic cases of insanity in both sexes as here shown, to that of the adult male and female population of England, according to the annual report of the Registrar General for 1866, as above stated. A fuller inquiry into this subject would be of great value and interest.

The following table, A, shows the assigned causes of death in chronic cases of from 2 to 5 years and from 5 years and upwards residence in the asylum.

Assigned cause of death.	RATIO PER CENT. OF CHRONIC CASES OF INSANITY.			
	2 to 5 years' residence.		5 years & upwards in asylum.	
	102 males	83 females	70 males	81 females.
Tubercular disease of lungs	26·4	37·4	23	44·4
Other diseases of lungs —broncho-pneum., &c.	36·3	26·5	37	17·3
Diseases of abdominal organs	5·9	9·6	10	21
cerebro-spinal organs	31·4	26·5	30	17·3
	100	100	100	100

Table B, shows the state of bodily health on admission in the chronic cases of insanity.

1st class—2 to 5 years.

State—Good in 20 per cent.
Bad in 34 per cent.
Indifferent 46 per cent.

100

2nd class—5 years and upwards.

33·7 per cent.
26·5 per cent.
39·8 per cent.

100

Table C, shows the ratio per cent. of the two classes of chronic cases of insanity at three periods of life.

Period of life. 1st class 2 to 5 years.

Under 40 years 36·8 per cent.
40 to 60 years 37·8 per cent.
60 years and upwards 25·4 per cent.

100

2nd class 5 years and upwards.

27·8 per cent.
39·1 per cent.
33·1 per cent.

100

The mortality in the more acute stage of insanity, of less than 2 years' duration was 64 per cent., in the chronic stage of from 2 to 5 years 20 per cent., and in chronic stage from 5 years upwards 16 per cent.

With a view further to show the amount of mortality from tubercular disease of the lungs amongst the inmates, the assigned cause of death in those of from 1 to 2 years' residence has been taken. There were 124 cases, 71 males and 53 females; of these 37 had tubercular disease of the lungs, 19 males and 18 females. The mortality from tubercular disease of the lungs in 20 years was as follows:—

TABLE D.

	No.	M.	F.	Total.
In those of from 1 to 2 years residence	37	per cent,	26.5	33.8
Do. do. 2 to 5 do. do.	58	per cent.	26.5	37.4
Do. do. 5 years and upwards	52	per cent.	22.9	44.5

From which there appears to have been an increase in mortality from tubercular disease in those longest resident, and that the increase is confined to the females.

In those who died from tubercular disease of the lungs or pulmonary phthisis, melancholia was the prevailing form of mental disorder; of 57 cases labouring under that form of insanity, 20 males and 37 females, 27 or nearly one half, 11 males and 16 females, died from pulmonary phthisis. One third of those suffering from mania and dementia died of pulmonary phthisis, and in idiocy as many as 43 per cent, in epilepsy 22 per cent, and in general paralysis only $6\frac{1}{2}$ per cent. In almost every case of general paralysis disease of the brain and spinal cord existed; any complications with disease of other organs, which frequently happen, may be considered secondary.

The other diseases of the lungs, pneumonia, bronchitis, asthma, pleurisy taken together, came next in frequency to pulmonary phthisis, and were very common in all the different forms of insanity.

Of 460 cases, of 2 years' duration and upwards, the assigned causes of death were as follows—

TABLE E.

Tubercular disease of the lungs in	.....	147 cases.
All other disease of the lungs in	.....	136 "
Disease of abdominal organs in	.....	49 "
Disease of brain and spinal cord in	.....	128 "
		—
Total	460	

In these 460 cases, 243 males and 217 females, the ratio of mortality is shown in

TABLE F

	Males.	Females.
From pulmonary phthisis	25.4	39.1 per cent.
," other disease of the chest	35.6	22.4 "
," disease of abdominal organs	7	15
," disease of cerebro-spinal organs	32	23.5
	—	—
100		100

The mortality from disease of the brain and spinal cord,

and from inflammatory affections of the lungs, was about one third more in males than in females, whilst the mortality was one third greater in females than males from tubercular disease of the lungs ; and from disease of the abdominal organs the mortality in females was double that in males.

MORTALITY AT DIFFERENT AGES.

Of the three given periods of life, viz :—under 40 years, from 40 to 60 years, from 60 upwards, the greatest mortality occurred at the middle period in both sexes ; at the last period it was greater among females than males, and this coincides with the Registrar General's returns.

SUMMARY.

The number of deaths in 20 years was 938, of these 542 were males and 396 females. What may be termed acute cases of insanity occurring

Within the first year, 478 died, 299 males, 179 females.						
From 1 to 2 years	124	do.	71	„	53	„
Chronic cases.						
From 2 to 5 years	185	do.	102	„	83	„
From 5 years upwards	151	do.	70	„	81	„
Total	938		542		396	

Of the 478 acute cases, of less than a year's duration, no statistics are given. The others are divided into three classes, 1st, those of from 1 to 2 years ; chronic cases of from 2 to 5, and from 5 years upwards. The form of disorder in the three classes is shown in the following table :—

TABLE G.

Mania	in 47	males and 68 females.
Monomania	in 9	and 10 „
Melancholia	in 20	„ and 37 „
Dementia	in 32	„ and 46 „
Epilepsy	in 60	„ and 33 „
Idiocy	in 20	„ and 12 „
General Paralysis	in 50	„ and 10 „
Fatuity	in 5	„ and 1 „
Total ..	243	217

The state of health on admission in the three classes was good in 66 males and 38 females; bad in 83 males and 74 females; indifferent in 94 males and 105 females. The assigned cause of death in the three classes was, from tubercular disease of the lungs in 64 males and 85 females, from other diseases of chest and respiratory organs, 87 males and 49 females, from disease of abdominal organs, 17 males and 32 females; and from diseases of the nervous system 73 males and 51 females.

In relation to those pulmonary diseases which are so frequently fatal in chronic cases of insanity, there is this peculiarity to be observed: that the usual symptoms affecting the respiration are almost invariably wanting; there is an absence of cough and expectoration, even throughout a long continued case of phthisis, where large tuberculous cavities are found in the lungs after death. Where a patient, therefore, appears to be failing in any degree in his usual state of health, a thorough examination of the bodily condition is necessary, including the chest by percussion and auscultation, in order to obtain the requisite information for the proper treatment of the case. Each case may require a different or varied treatment. The almost indiscriminate use of stimulants has of late years been too much in vogue. In sudden attacks, as epilepsy, an opposite treatment—the abstraction of blood by cupping—has proved beneficial. For a medical officer of an asylum the knowledge obtained by clinical instruction in the diagnosis of disease at a general hospital is the best preparation, as correctness of diagnosis is especially requisite with the insane, who are impatient like children, and give either no information, or such as may mislead.

In concluding these few remarks on chronic cases in asylums and workhouses, it may be observed that had the Poor Law Bill of Mr G. Hardy been applied to the kingdom generally, instead of being confined to the Metropolis, it might have provided for all such cases, to the relief of over-crowded asylums, by appropriating the vacant room in the country union workhouses to their use, under proper regulations, without the expense of adding new buildings. It would be well if the laws relating to medical relief and pauper lunacy were amalgamated and properly administered. Diseases, whether of the head, trunk, or limbs, are still of the body, and had better be treated as one; treated quickly and efficiently, which would prove in the end both the best and the cheapest course.

Remarks on the use of the Bromides in the treatment of Epilepsy and other Neuroses. By W. B. KESTEVEN, F.R.C.S.

(Read at the Third Quarterly Meeting of the Medico-Psychological Association held at the Royal Medico-Chirurgical Society, April 29th, 1869.)

I do not pretend to have anything original to bring under your notice; but, solely with the desire of contributing toward the attainment of precision in the employment of remedies, I venture to ask the attention of the Society for a short space of time to a few remarks upon the use of the Bromides in certain of the Neuroses.

The combinations of Bromine with iron, ammonium, and potassium, have only of late years attracted the attention of the medical profession in a degree at all commensurate with their importance.

Soon after their first introduction, some thirty years ago, they fell into unmerited disuse, probably through their having been administered in too small doses. They are now, however, recovering their position, and from being looked upon with doubt, and even disfavour, they are in danger of becoming "the fashion."

Their properties are, moreover, somewhat vaguely stated in works on *Materia Medica*. Thus, they are styled, "Alteratives," "Deobstruents," (whatever those may be), Sedatives, Calmatives, Soporifics, &c., and, they have, as it seems to me, been prescribed in a somewhat indefinite manner.

My experience of the uses of these medicines being restricted by the limited range of private practice, I fear I shall appear presumptuous in bringing my small number of cases under your notice. Any inferences, however, that may be founded thereon will perhaps be allowed to be more reliable from the fact that the patient and his family, and what I may briefly call his "tendencies," are known to me; whilst also that he is more regularly under my observation.

I have prescribed the bromides in Epilepsy, Laryngismus, Convulsions, Chorea, and certain nervous headaches in Melancholia, and acute mania. For the other purposes referred to I have not seen that they possess any advantages over Iodides.

The dose of Bromide of Potassium generally stated in works upon therapeutics, is from five to thirty grains. This dose is wholly insufficient: if stated at from fifteen to fifty grains, it would form a more correct and useful statement of doses. In order to secure its beneficial effects, this medicine must be given in these large, and what might perhaps be called by some, excessive, doses. Its use may be continued for a long time—and if its administration be watched, the fear of injurious effects will be found groundless. I am speaking here of the Bromides alone. In this as in many other instances the multiplication of remedies often misleads the prescriber, and obscures the operation of the most active agent.

Dr. Beaman, who has a large experience in the treatment of epilepsy (and to whom I am indebted for having drawn my attention to the value of the Bromides, given in large doses), combines these with various sedatives. For my own part, having obtained satisfactory results without this addition, I am disposed to regard them as generally superfluous. A certain degree of drowsiness is one of the occasional results of their prolonged use in large doses, but in those instances in which I have seen drowsiness to an *extreme* degree, the combination of sedatives with the Bromides has been in force.

I have not preserved notes of all the cases in which I have prescribed these salts, but to illustrate the preceding remarks I have put together brief memoranda of a few cases at present under my care.

I should state that, with reference to cases of epilepsy to be related, I include only those which may be termed "idiopathic"—excluding mere temporary seizures, without apparent cause, and not recurring. I exclude also all cases having for their causes syphilitic disease, blows, tumours, or organic disease of the brain, &c.

Case 1.—Mrs. T. has been the subject of Epileptic seizures for ten years. They first occurred after severe mental distress following on the death of her husband. Four years afterwards she married again, but the fits continued to occur as before—*i.e.*, daily. In September last I prescribed Bromides of Ammonium and Potassium, of each five grains. No fit occurred until Nov. 1st, and that was a slight attack. Nov. 13th and 19th two slight attacks. In the month of December she had three trifling seizures. From that time (Dec. 13th) she has taken 25 grs. three times a day and has had no return of the fits. Her general health has improved,

and she has lost a depression of spirits from which she had suffered a good deal.

Case 2.—EPILEPSY.—Mrs. G., aged 72 years. This lady (widow of a physician) lost her husband by sudden death in Septr., 1866. A few weeks afterwards she had an epileptic convulsion in her sleep. She had never had a fit before. The attacks recurred about every four weeks, generally during night, in her sleep. Her general health is excellent; she is a hale, active woman, possessed of a large share of both mental and bodily energy. She is a great walker, frequently to the extent of six or seven miles at a time.

The attacks pass off without leaving any trace behind, unless it be in certain indefinite crampy feelings occasionally in the lower extremities.

There is no noticeable excess of force in the carotid pulsations.

For the last eighteen months she has taken the Bromide of Potassium alone—fifteen grains, twice daily.

The interval since the last fit is twelve weeks.

Case 3.—EPILEPSY.—J. R., æt. 40 years. This patient has been subject to epilepsy from his infancy. The fits have been very frequent and very severe, so that his mind had become enfeebled and memory much impaired. The bodily health is good. In this case there is an hereditary tendency to the disease, as his mother is also under my care, with cerebral disease.

I saw him first in May of last year. The attacks were then so frequent that he could not be left alone. I prescribed fifteen grains of the Bromide of Potassium, with half a drachm of Succus Conii. The convulsive attacks became less frequent. Drowsiness supervening, the conium was omitted, and the Bromide was continued in twenty-five grain doses, with the effect of improving the health, both of body and mind, so that he is able to walk out alone, and can occupy himself with reading, &c. His existence is no longer the burden to himself and others that it had been. He is, however, obliged to continue the use of the medicine under a penalty of recurrence of the fits on its omission for several days. This penalty I found had been incurred lately through neglect of the medicine. In this case it is worth noting that an inveterate eruption of acne, one of the reputed sequences of the use of Bromides, has almost cleared off since his health has improved under the use of the Bromides—the dose of which I have increased to thirty grains, twice a day.

Case 4.—EPILEPSY AND IMBECILITY.—Mrs. R., æt. 80. The mother of the last mentioned patient—has been many years in her present state, with frequent recurrence of fits. Under the use of fifteen-grain doses of Bromide of Potassium, the intervals between the epileptic seizures seem to have been prolonged.

The manifestation of the condition of this lady's brain is one of morbid excitement. She is in a happy state of volatility, ever laughing, and talking a tangle of disjointed words and syllables. From this lively condition she will sometimes suddenly go into a state of stupor, in which she will remain for a day or two, and as suddenly come out of it again. The use of the Bromides has had no apparent influence upon the state of her brain, beyond prolonging the intervals of the fits.

Case 5.—EPILEPSY.—F. B., æt. 23 years. The fits came on about ten years ago, without any assignable cause, and occurred daily. They became less frequent (once in ten days), but were so severe that he was entirely prevented following his occupation. Since the 21st of February he has been taking thirty-grain doses of Bromide of Potassium alone, and has had no fit since that date. His health is improved and he is able to resume work, viz:—assisting his father in “Buhl-work,” or inlaying metals on wood. Up to the date of his last visit to me (April 26th) he has had only one slight fit since the 15th of March, and that was also of a trifling character.

Case 6.—EPILEPSY.—A. B., æt. 21 years. This girl has had severe epileptic fits from the age of five years. For several years past they had occurred daily, and so frequently that she could not be safely lost sight of for a few minutes. Her mind had become enfeebled and her bodily health indifferent; Catamenia irregular.

In January, 1868, Bromide of Potassium and Ammonium, 15 grains each, were prescribed, with half a drachm of *Succus conii*. She had no fits until the following April, when the medicine had been neglected to be given. In May she had so much improved that she was able to perform domestic duties. From the last date she has taken twenty-five-grain doses of Bromide of Potassium alone, twice in a day—not very regularly, I fear, but her fits are now few and far between, despite her mother's carelessness as to the administration of the medicine.

Case 7.—EPILEPSY.—A. H., æt. 40 years. Has been the subject of severe fits for the last twenty-two years. They have been of a very severe character and occurring daily. They were at first regarded as hysterical; afterwards they were attributed to ulceration of the os uteri. The treatment directed to this supposed cause only aggravated the evil. The seizures at last became so frequent as to occur several times in a day, so that she was in a constant state of apprehension of their recurrence.

She came under my care in January last. I then prescribed twenty-five grains of Bromide of Potassium, with fifteen grains of Lactucarium. This combination was continued for a month with great benefit, the fits being arrested. Since then she has taken the Bromide alone. The dose she is now taking is forty grains. Her health has improved, she has lost the mental depression, her memory improves, and only two very slight seizures (hardly, she says, to be called fits), have occurred for upwards of three months. Some drowsiness having occurred, the dose has been reduced one-half. No further attacks have occurred (April 27th).

Case 8.—GASTRIC EPILEPSY.—E. W., æt. 9 years. About four years ago began to complain of severe pains in the epigastrium coming on suddenly at uncertain times. For a long time these were regarded as symptoms of acute dyspepsia, and treated accordingly. After a while it was observed that the attacks were attended with some loss of muscular power, so that if not supported he would fall, and indeed on one or two occasions he did fall to the ground. It was next noticed that after the attack of pain passed off he complained of a feeling of weariness, and during the attack the eyes had a staring look. On some occasions he has fallen asleep after the pain has subsided. I believe also that once or twice he has lost consciousness for a few moments; but I have a difficulty in making this clear, as his parents dread the word Epilepsy, and are alive to its symptoms.

I prescribed Bismuth with small doses of Bromide of Iron, without much advantage. Dr. Ramskill saw the patient in consultation and concurred in the view of the epileptic nature of the attacks. It was agreed to push the Bromide. The Bromide of Potassium was gradually increased in dose to thirty grains twice a day, without any ill effects—on the contrary—the attacks have become less frequent and severe, seeming to be entirely passing off, so that at present he takes only one dose daily.

In *Laryngismus Stridulus* I have frequently prescribed the Bromide of Iron with advantage, as also in the *Convulsions of Infancy*. Infantile Convulsions, it is true, may mean almost anything, as they may arise from various causes, but the cases to which I refer have been those in which, after due attention to hygienic conditions, and the removal of obvious causes, the convulsions have persisted.

Both these convulsive maladies, it is admitted, have a natural tendency towards health; nevertheless I feel convinced that these medicines have, in many cases, exercised a controlling influence over them.

Two cases only of *Chorea* have come under my notice within the last year. In one case very decided and marked benefit was observed to follow on the use of Bromide of Potassium, even in much smaller doses than I was at the time aware might safely be given to children.

Case 9.—CHOREA.—The patient, aged 9 years, had suffered from Rheumatism and had enlarged ricketty joints. She had been the subject of unilateral chorea for many weeks. I had tried various remedies without success. I ordered five grains of Bromide Potassium three times a day: from this time improvement was very obvious and rapid in its course. I cannot persuade myself that the result would have been the same had nothing further been done.

The remedy was selected for the reason that the affection of the muscles in Chorea has a near resemblance to their condition in Epilepsy. It occurs in similar conditions of general debility, or of some local change of the circulation in some portion of the nervous centres.

In what are somewhat indefinitely termed *Nervous Headaches*, I have very frequently seen the Bromides of service—while in other cases they have produced no good effect. In one case, however, the influence for good has been so undoubted that I have thought it worth while relating to you.

Case 10.—EPILEPTIFORM HEADACHE.—A girl aged 18 years: was in infancy liable to alarming epileptiform seizures on the receipt of any slight blow or accidental injury, even trifling. During childhood this liability seemed to be passing off, but when nine years of age, after having run hard against a strong wind, she experienced an attack of vertigo, with dimness of vision, and numbness down one side (the left as far as I can learn). Attacks of this

kind of greater or less severity occurred frequently, coming on suddenly, under no regular set of conditions, but always preceded by severe headache. The headache, however, would often occur without the other symptoms—it would last an uncertain time and pass off suddenly, it would be incurred by mental application, but was never attended with loss of consciousness in any degree.

About a year and a half ago I prescribed ten grains of Bromide of Potassium to be taken early every morning—from the date of the first dose the headaches have entirely ceased—the medicine has been discontinued for upwards of eight months past.

The suspicious alliance of this case with imperfect forms of epilepsy, and the severity of the symptoms, together with the marked influence of the bromide, has rendered this case notable to me.

In approaching the subject of *Insanity* I necessarily feel great hesitation in speaking before gentlemen, many of whom have devoted their lives to its study in the wide fields of observation presented by public asylums, whereas my practical acquaintance with mental diseases has been but of a few years' duration in the narrower sphere of non-resident attendance upon a private asylum. I will merely mention that in two cases of acute mania and one of melancholia that have come under my care lately, in my own private practice, I have thought that convalescence has been accelerated by these medicines. As, however, in such cases, the indications for the use of the Bromides are not clear to me I am anxious not to confound the *post* with the *propter hoc*. It may be that what seemed the effects of the medicine in clearing off the remainder of the disease, may have been seeming only. As, however, in my two cases the improvement was so striking I bring them forward only as an excuse for endeavouring to learn whether my small experience is borne out by the larger experience and wider knowledge of members present.

My intention has been to treat of this subject from its practical aspect only; I may, however, without presuming to open up so wide a discussion as that of the pathology of convulsive disorders, briefly allude to a physiological and pathological view that promises an explanation of the *modus operandi* of our remedies.

It was formerly held to be an indisputable fact that all convulsions depended upon congestion in, and pressure upon, some part of the Brain. This view is even now held by some, although the evidence drawn from the symptoms of Epilepsy rather tends in the opposite direction.

It is now maintained, by many scientific observers, that all the phenomena of the epileptic seizure are more rationally explained upon the assumption of a rapid diminution of the supply of blood to the nervous centres.

As having a bearing upon this question I may refer to the researches of Mr. Durham on the state of the blood vessels of the Brain during sleep. There is doubtless a close connection between the conditions in sleep, somnambulism and epilepsy. Mr. Durham has shown that the notion of a state of fulness or congestion of the vessels of the Brain during sleep is erroneous—on the contrary, he has proved its condition to be exactly the reverse.

Dr. Hughlings Jackson, to whom we are indebted for much light thrown upon obscure questions in cerebral pathology and physiology, has confirmed the conclusions of Mr. Durham by ophthalmoscopic examination of eyes during sleep.

Mr. C. H. Moore, moreover, has endeavoured to supplement the researches of Mr. Durham by a theory of the contraction of arteries outside the brain at the moment of going to sleep, inducing the comparatively empty state of the vessels within the Brain.

It appears to me that the inferences deducible from these investigations into the conditions of the circulation in the Brain are applicable to the explanation of the phenomena of Epilepsy, Chorea, and convulsive disorders.

I assume as the starting point in these cases, that the blood supply to the nervous centres is suddenly diminished by arterial contraction, whereby, as in the sudden abstraction of large quantities of blood, the epileptic fit is induced. I have myself witnessed, as doubtless others have also, a severe convulsion and not a mere faint, follow upon bleeding from the arm, *pleno rivo*, in the days when venesection was practised, not only therapeutically, but strange to say, as a mere means of the diagnosis of inflammatory diseases.

In support of this view I again quote my friend Dr. Hughlings Jackson who traces the paroxysm in certain epileptic seizures to a sudden change of blood supply in limited tracts of Brain, for instance to deposit of syphilitic tubercle in limited arterial regions, the nervous structure itself being con-

tinuously altered, unstable, and ready to discharge on slight provocation. Moreover it was the opinion of Dr. Kirkes, and it is that of Dr. Jackson,* that Choreic movements are induced by Embolic plugging of cerebral arteries with fibrinous deposits derived from the valves of the heart as in Rheumatic disease.

It would not be a profitable occupation of time to attempt to review the principal opinions upon Epilepsy—with these my hearers are familiar, from their own observations as well as from the writings of acknowledged authorities.

I may, however, add that the chief arguments in support of the view which assumes an anaemic condition of the Brain are ably brought together in a lecture by Dr. George Johnson.† My attention has been drawn to this paper only since the previous remarks were written.

From what has been said I would venture to submit the following conclusions: —

1. That by reason of their possessing a special influence on nerve tissues, and upon the vaso-motor nerves, whereby they prevent sudden arterial contraction, we have in the Bromides most valuable remedies for certain affections of the nervous system, as above mentioned.
2. That in order to obtain their full therapeutic powers the Bromides must be given in large doses, and their use prolonged.
3. That where these medicines are not efficacious to work a cure, their influence is sufficient to diminish the severity and prolong the intervals of epileptic seizures.

A Visit to the Friedrichsberg Asylum. By F. OPPERT, M.D.

THIS institution for lunatics is situated near Hamburg, about a mile from the general hospital, and part of it was first opened in December, 1864. It is one of the most recent and complete asylums in Germany, and, the number of beds having been recently much increased, can accommodate about 370 patients. The land was cheap at the time of the construction, and therefore the grounds in which the buildings

* London Hospital Reports, 1869, vol. 1. p. 459. Lancet, Nov. 24, 1868.

† Brit. Med. Journal, March 21, 1868.

stand are very large ; they are partly used as a farm. The *principal building* has the form of a square, open at one side, with numerous projecting portions, especially in the centre, where the administration is located, and officers' dwellings, kitchen, wash-house, and baths are found. The blocks which form this incomplete square have corridors running at one side, by which, however, they are not connected in the usual manner, but the connection is broken at the corners. The passages are 12 feet wide, lofty, and ventilated by end windows ; they are warmed by hot water pipes.

The male patients are on the right side of the courtyard, the female on the left, and they form three divisions respectively, a fourth being accommodated in another building. The first division is formed by bedridden patients, the second by quiet patients who want a great deal of attendance, the third by quiet ones who are able-bodied and work. A number of 30 to 40 patients form, as it were, a family, with sleeping, day-rooms, closets and lavatories for common use. The sleeping rooms on the first floor are large and contain wooden bedsteads, which sometimes stand a little too close. They have windows on one side only, the door being opposite. There are no means of warming, but warm air from the corridor may be admitted through the floor, which is of deal. There are ventilators near the ceilings and a few foul air channels leading into the smoke shaft. The *windows* are on a uniform plan, of wood and iron. The horizontal bars are of wood and the vertical ones of iron ; they pass through holes drilled through the wood. The day-rooms (6) are generally placed in projecting portions of the building and have windows on more than one side. The walls are painted a lively colour, and a door leads into the grounds. The closets generally are not water-closets but privies, ventilated by windows and by extracting the vitiated air downwards through the agency of the chimneys. The lavatories are of metal, on the lift-up principle. The baths are some of zinc, others of copper.

The *central* part has three floors, and contains a large hall, the chapel on the second; offices and workshops, as also some single rooms, are on the first. The wings have only two floors, and their corridor is used as a dining room, the tables being fixed to the walls, knives and forks are of the common pattern, and no accidents are said to happen. The doors of the corridors leading into the garden are always open in summer.

Each division has a courtyard attached to it, surrounded by

high walls, where the patients take exercise or work. The building containing the fourth division of refractory patients stands at the back. It contains dormitories, day-rooms, and their appendages, as also three cells on each side; one for every 40 patients. They are much more roomy than those of other asylums, have no small windows for observation, and a pretty large window opposite the door near the ceiling. The floor is of asphalte; the walls on various plans. One cell has cemented walls, oil-painted, another wooden ones of oak planks, but they are reported as difficult to be kept clean in the joints. The cells are warmed by hot air. The part where the cells are is one floor high, the central one two floors.

All parts of the building are lighted by gas.

Another separate part of the hospital, not on the plan, is the institution for paying patients: "*Pension's Anstalt.*" It was considered better to bear with the prejudices of patients belonging to a better class and their relations, who would feel offended by seeing them in the same rooms with the poorer ones. The building has two wings, with a small connecting central portion, and is arranged in accordance with the greater pretensions of the inmates.

A porter's lodge and dwelling house of the senior medical officer are near the entrance, the door of which is almost always open, thereby facilitating the escape of patients more than it ought to do. The junior officer is accommodated in the central part.

The kitchen contains steamers, hot plates, and other improvements; the wash-house various machines; there is a dead-house in the grounds.

Treatment. The restraint system is not in use; at the time of the visit only one patient was in a strait waistcoat; the cells are not much used. There are billiards to amuse the patients, also a library. Farming, tailoring, sewing, washing, and recently, basket making, occupy the time of some of the patients. The hydro-therapeutic remedy is frequently resorted to. A great many patients suffering from delirium tremens (147 in 1866) are admitted, to whom opium is very sparingly administered, but nourishing diet, wine, and rest.

A medical report, published 1867, states that it was generally possible to trace bodily ailment as a cause of the malady. Of 279 patients who were discharged or died in 1866, 6 suffered from hereditary brain disease, 38 from chronic inflam-

mation of the brain and its membranes, 6 from apoplexy, 4 from embolia and softening, 2 from hydatids, 21 from senile atrophy of the brain, 41 from dyscrasia potatorum, 161 from general debility, which included cases of anaemia through haemorrhage, fever, excesses, etc.

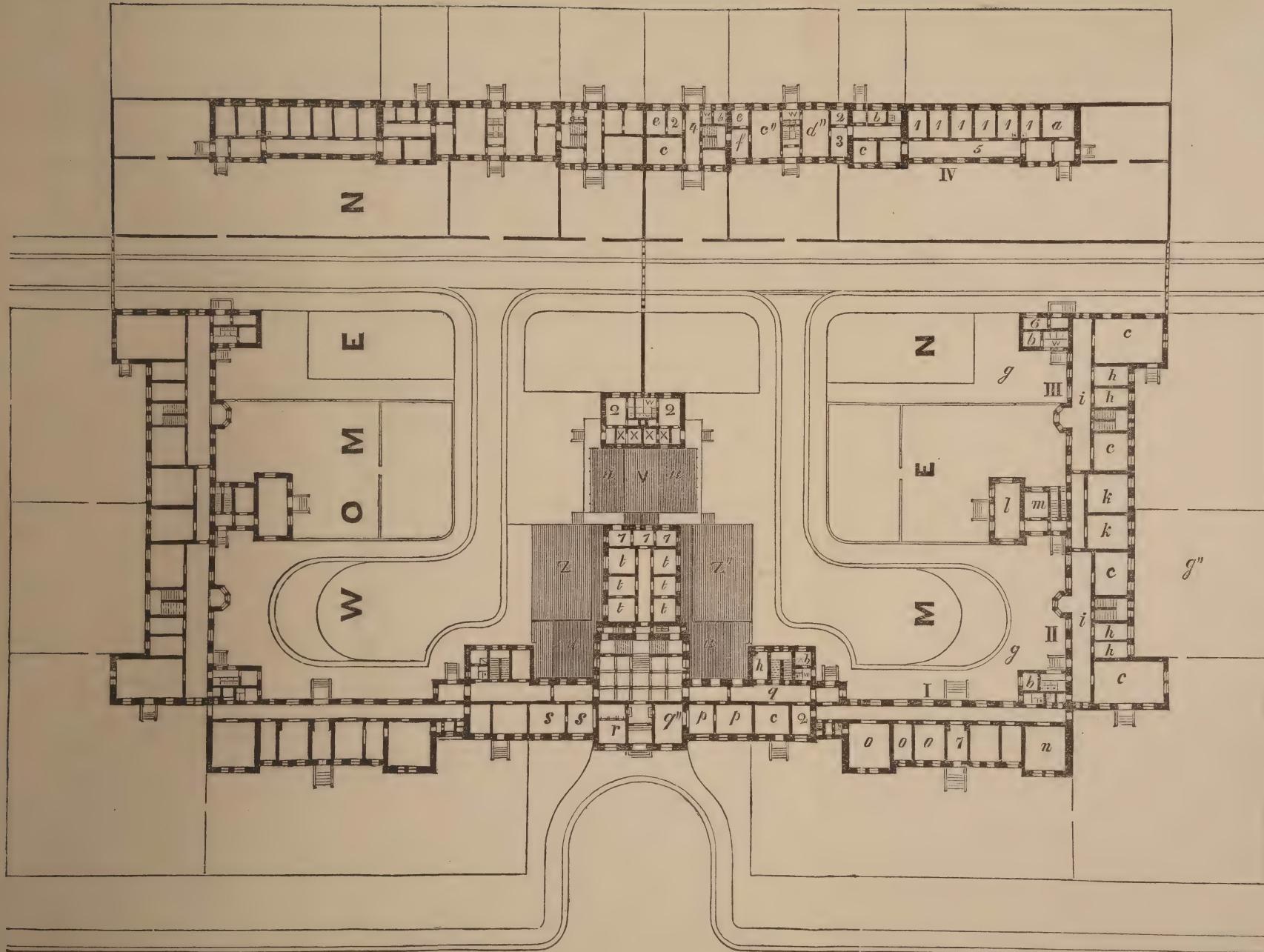
Finances. Part of the income is derived from patients' payments. More than one half pay nothing for their maintenance, but the rest either contribute themselves to the funds or others do so for them, and they form classes according to a fixed scale. The total income is about £9,000, £3,500 being patients' contributions, nearly £4,500 subsidies by the government, and the small rest is made up by the interest of capital. The disbursements, amounting to the same sum, include as the highest item, meat £1,200, wages £1,000, firing £900, medicines only £80.

A separate fund, *Juliusstiftung*, is raised by voluntary contributions, and serves as a convalescent fund, as also for providing means to amuse the patients. Furniture, pictures, &c., adorn the walls, and similar things are accepted as in English institutions.

INDEX TO GROUND PLAN.

THE FRIEDRICHSBERG ASYLUM.—GROUND FLOOR.

a.	Stores	u.	Low Court
b.	Scullery	v.	Boiler
c.	Sitting Room	w.	Closet
d,d''.	Bed Room	x.	Vapour Bath
e.	Separation Room	z.	Wash-house
f.	Tea Kitchen	z''.	Kitchen
g,g''.	Courtyard	I.	First Division
h.	Single Room	II.	Second „
i.	Quiet working patients	III.	Third „
k.	Workshops Above h, i, k are bedrooms	IV.	Fourth „
l.	Day Room	1.	Cells
m.	Head Attendant	2.	Bath
n.	Melancholy patients, most in bed	3.	Attendant
o.	Bedridden	4.	Refractory Patients
p.	Medical Officer	5.	Corridor
q,q''.	Admission Rooms	6.	Lavatories
s.	Inspector	7.	Lobby
t.	Officials		



GROUND PLAN OF THE FRIEDRICHSBERG LUNATIC ASYLUM.

Matter and Force considered in relation to Mental and Cerebral Phenomena. By J. THOMPSON DICKSON, M.A., M.B. Cantab., M.R.C.P., Resident Medical Superintendent of St. Luke's Hospital.

WELL sang the Psalmist: "If I take the wings of the morning and dwell in the uttermost parts of the universe, God is there." Thou too, O cultivated reader, who too probably art no Psalmist, but a Prosaist, knowing God only by tradition, knowest thou any corner of the world where at least *Force* is not? The drop which thou shakest from thy wet hand, rests not when it falls, but to-morrow thou findest it swept away; already on the wings of the north wind it is nearing the Tropic of Cancer. How came it to evaporate and not lie motionless? Thinkest thou there is aught motionless; without force, and utterly dead?

Sartor Resartus.

THE substance of the following paper was in March last read before the Medical Society of London. Its subject is a consideration of the molecular changes the brain undergoes in the production of mental impression; the Potentiality of the vitality of the brain; and the physiological process by which affirmation or negation of idea about idea, or that process which we call reasoning, occurs. Its object is the attainment of a comprehensive view of cerebral phenomena under normal conditions. Its practical bearing is upon that class of diseases which we call subjective. In entering upon such a discussion I doubt not I may be met with an objection on the score of the apparent impossibility, in the present state of our knowledge, of determining any change at all in an organ we cannot to any extent see, still less examine, during the life of the individual. I will, therefore, at once answer that I purpose drawing my conclusions by simple induction from facts that are daily before us; and since exception may be taken to some of the terms employed, I will commence by defining those which are important, as far as their precise meaning has any significance in this paper, and illustrating the definitions, so far as illustration may serve to make more clear the idea intended to be conveyed.

Much that I may state as fact will of necessity be not new, but perfectly well known and familiar, but it is curious in how strange and new a light old facts often appear from a new point of view; while by the rearrangement of our mate-

rials for induction, startling and unexpected conclusions may not infrequently be arrived at.

The term *Force* we understand to express that physical property in a body which separates its atoms. Force may produce action or visible motion in another body or may counteract such action—in other words Force is a term applicable to any mode of motion. Force has an existence *in potentia* in everything that is visible or tangible.

Matter.—By the term matter we are to understand not only a mass of material but the simple elementary substance of which everything that is visible or tangible is composed.

We can best appreciate matter as particles or atoms held together in certain relations. Were there no such potentiality as *force* the condition of matter would be that of absolute mass and inertia; as it is, however, no substance is absolutely a mass, but its atoms are separated from one another in a greater or less degree. In the least condition of separation we have solids, in a separation of atoms beyond a certain degree we have that form of body which is presented to our senses as liquid, and beyond a second standard we have that separation of atoms which we recognise as aeriform or gaseous.

The relation of mass to volume is more or less the inverse of the potentiality separating the atoms. The atoms of matter are absolutely indestructible, and it may be contended that force also is not capable of annihilation, though we use the expression used up, spent, or latent, merely indicating thereby that as the matter has changed its mass or volume, so the force or motion which was the essential characteristic of that mass or volume has changed its mode.

By the term *Potentiality* I mean possibility not actuality—the quality which exists in certain bodies *in potentia* only—that is, having power or influence of affecting or impressing us in some measure without being actually inherent in that body; the word having the same import as in the expression potential heat or potential cold.

By the term *Motion*, I mean not that visible motion which we recognise as the resultant of two or more forces, but motion in the abstract, that abstract idea of a property which influences the atoms of matter and becomes manifest to us in various modes, as light, heat, electricity, chemical affinity, &c., all of which are correlative.

By the term *Vitality* I mean the principle of animation.* It is hardly necessary for me here to enter upon the arguments showing that the principle of animation—which, for want of a better expression, I still prefer to call Vitality—is in the abstract that same influence and principle which we have a notion of in the abstract idea of motion. I believe that this is now on all hands accepted.

Potential Energy is an expression I propose to use as synonymous with Vitality. I have already, in defining potentiality, illustrated the idea in the expression Potential cold, but since cold has no existence *per se*, unless it be accepted as the negation of heat, so in speaking of Potential heat we recognise that quality which influences the mass, and though not actually inherent yet is capable of manifestation as heat, by alteration of the arrangement of the particles or atoms of which the body is composed; this quality existing only *in potentia* is admitted to be motion, and *heat*, its manifestation, is called its mode. So likewise, by re-arrangement of the atoms of some forms of matter, we recognise a quality which influences the mass, though not actually inherent in it, but manifested to us as energy, which is unquestionably motion; the more certainly is it so because it is capable of conversion into, and is correlative with, all the other modes of motion with which we are acquainted. It is for this manifestation of motion I for the present retain the modal expression Vitality. Vitality or Potential energy is, therefore, not the resultant of the various physical forces operating together upon a mass or organism, but is itself a Force, operating as a force either directly as when brought to bear on any external, or indirectly as manifested in resistance when any other force is brought into antagonism with it.

The resultant of the vital with any other physical force is exhibited to us in that which we recognise as or designate a Vital Phenomenon: this may be familiarly illustrated in contraction by galvanizing a muscle.

The first point for our consideration is the process by which

* In the discussion upon my paper on Vitality considered as a Mode of Motion, read last year (1868) before the British Association at Norwich, objection was made to the use of the term vitality, on the ground that it was a word of metaphysical import, and therefore ought not to be employed in a physical enquiry. I answered then that my reason for using it was that it expressed the idea I wished to convey, and was generally understood, while physical science had not yet provided a substitute to express the idea of the principle of animation. I feel the force of the objection, yet still must give the same answer—the word is used, however, as a term expressing a mode of motion and significant only in its employment as expressing motion in the same degree as light or heat are employed to the same end.

mental impressions are formed. It is out of the province of this paper to undertake the metaphysical question as maintained by Sir William Hamilton, that "what we are conscious of is constructed out of what we are not conscious of;" suffice it to say that consciousness is not the basis of intellectual operations, though it may often be the result; and it is sufficient for our purpose to recognise with Hume, that "we are not wiser than our experience," or with Mr. Mill, "that experience is the foundation of all knowledge."

Our ideas, crude and simple, are vital phenomena the resultants of motion, communicated from our sense organs through their respective conductors or nerves, and the potential energy of certain brain cells with which those nerves communicate.

The impression of any external object upon a sense organ, whether it be audible, visual, olfactory, gustatory, or sentient, is an impression of motion which is at once conducted as a current through the nerves, as the motion of electricity through the wires of a telegraph, to certain cells in the brain. Change instantly occurs in one or more of these. It is not that it or they are simply set in vibration or motion, but the motion communicated to them is antagonised by their potential energy, the resultant being a change in the chemical and physical constitution of that cell or those cells; the chemical change being that re-arrangement of atoms which occurs in all chemical phenomena; the physical being that which in a greater or less degree stamps upon the cell or cells that which we recognise as the impression of the external object from which the motion was communicated.

A third phenomenon also obtains; the motion set up in one cell, or one particular set of cells, does not only affect that cell or that set, but is communicated to others in the immediate vicinity, inducing changes in them.

The evidence of the change in the cell resulting in the impression is conclusive from the fact of the impression remaining.

The evidence of the chemical change is conclusive also, for we obtain the material atoms in their changed form when thrown off as effete material.

The motion, inducing the impression in the cell, so changes the relations of the material atoms of that cell that we find that a substance has been formed there which was not present before. I would here note that experiment has gone to prove that the particular form of chemical change that occurs in all mental exertion is the production of certain phosphates; but

it must be remembered that this new formation is merely a change in the relation of material atoms through the using up of some of the motion that held them in their former relations: it is not adding or taking away any material, any more than the conversion of water into ice adds to or takes from the exact quantity of matter operated upon. But as the relation of the atoms has changed, so the motion, which is now greater, in possibly a calculable amount, than before the external impression was received, has also become altered in its mode, and becomes manifest as chemical force, which further on in the cycle is evidenced.

A reservation is perhaps here necessary, for it is evident that all the material atoms of a cell may become so changed that all its potential energy may be exhausted or used up, and thus no further vital phenomena be possible in it. This, in fact, would take place were it not that those changed and useless atoms are removed, and their place taken by other atoms of the same nature and property as those that constituted the cell before the change occurred. The effete material is taken up by the circulating blood, from which pabulum by the chemical phenomenon of substitution the new atoms are supplied, which replenish the cells and enable them to maintain their vital activity; the material for supply to the blood of course being derived in the periodic assimilation of nutrient matter, while the effete and useless phosphates are separated from the blood by the kidneys, and are to be found in the urine.

The evidence of the third phenomenon is perhaps not quite so demonstrable, but a little reflection will, I think, render it equally conclusive. An impression formed by the passing of a current from the periphery to the centre is immediately followed by the rousing in the mind of another or other impressions; for instance, we become sensible through our olfactory nerves of the perfume of a rose, and though we may not see or touch the flower, we directly have the impression of a rose in our minds; and as this second impression could not be called into prominence without some communication more or less direct, and as we admit that it has immediate association with the antecedent, and also that no communication can be made without the expenditure of motion—we have sufficient reason for the conclusion that motion has been communicated from the cell or cells set in activity in the reception of the first impression.

If now we accept as fact the theory of motion in its relation to vital phenomena, and the changes in the brain cells, the

result of the influence of motion, as above stated, we can analyse some of the phenomena of mind in relation to their production.

The simplest of all mental phenomena is that of simple apprehension, and next to this, and associated with it, is memory; while judgment and reasoning are entirely dependent upon the perfection of those so called attributes.

Simple apprehension we have witnessed in the production of a simple impression: we see a rose, and we become conscious of its existence; its image fades from mental view, and we are occupied with other objects and thoughts, but the image is not lost, the impression made on a cell remains, the cell is permanently changed, and continues in its new condition as long as it is healthy and intact.

How inappreciable is that change when the brain has again become quiescent, yet how slight a disturbance will again render it prominent. We live with our impressions in calm apathetic oblivion, till the equilibrium of the cells bearing them is again disturbed, their variations are then apparent, their spectra again come into mental view. One cell differs by comparison from another, and we appreciate the difference; in other words, we are conscious, but consciousness means only this appreciation of difference of one cell from its fellows; this activity, however, can only occur through the direct or indirect influence of motion. *

* I am duly sensible that I am at this spot bordering upon ground too soft to bear almost the lightest foot tread. Nor have I any wish here to enter upon a metaphysical controversy, as such is far removed from the objects of this paper. I have, however, been asked to define the pronoun we used in the above passages, a question which is an evidence of the great difficulty there is in throwing off that feeling of individuality which has so complicated the various systems of mental philosophy. It is, however, essential in a purely scientific inquiry to shake off the shackles of metaphysical mysticism, to free ourselves of the notion of an ego, and, regarding ourselves as we do the lower animals, we may make observations on our physical and psychical attributes.

It has been argued that if the mind be alone dependent upon changes in the material brain, that we can have no control over our thoughts and passions, and that we are, therefore, irresponsible beings, but this has been met by granting that we have the powers of volition. We avoid running into danger we are conscious of, *i.e.*, of which we have experience. Volition thus comes to be a dependent of experience, and results like it from the operation of impressions of things without. Again, that which we term conscience is but the standard of comparison of right and wrong, formed by experience in the mind of the individual. Almost the earliest impressions instilled into the infant by its fondling mother are coercive separations of right and wrong, as defined by her own conscience, separating in the infant mind on opposite sides of the standard line ideas of right and wrong often most puerile and not antithetical; as the child grows and the basis of his experience enlarges, his standard of comparison advances. Many of the puerile wrongs of infancy and childhood appear as wrong no longer, and his line of separation, *i.e.*, his conscience becomes fixed in accordance with the moral and civil laws of the polity in which he is placed.

The same phenomena obtain in all the other cells and collections of cells in the organism, and are not peculiar or limited to brain cells. We are not ordinarily conscious of having limbs till we injure them, or of having lungs or pleuræ, till they become inflamed, and after the first impression of the injury, or inflammation, we would perhaps be equally unconscious of the existence of these our belongings, could we keep them free from motion. But every movement of a broken leg acutely reminds us that we possess the member, and every respiration during a pleurisy, makes us consious that we have a pleura, or the increased vascularity of the inflammation maintains a motion which we become aware of as the phenomenon of pain. So in our brain, though we cannot perhaps say, without reservation, that a cell is injured because it is changed by the impression of an object, yet the change is itself sufficient to define and make evident that cell's existence among its fellows, whenever it or they together are subjected to the influence of motion.

We are conscious of an image so long, and only so long, as the cell or its atoms continue in motion, and our consciousness ceases when the cell again becomes quiescent; but disturb the cell's equilibrium again and the image is reproduced, however slight the motion. The cell becomes active whenever motion of another cell is communicated to it; the current or vibratile motion, inducing material change in the cell it reaches, very similar to that which took place in the one from which it proceeded, though in a less degree, while the appreciable phenomenon is the faculty of the mind we call memory. The memories, too, occur in order, and the order is more or less that in which we have gained our experience, *i.e.* received our impressions; for instance, if we can imagine a brain in which no impression has ever occurred, and place a rose before the organs of senses in connection with it, we shall probably first produce through the medium of sight the impression of colour; next through the intervention of the sense of touch, the impression of form, dimensions, &c.; and thirdly, through the olfactory nerves the impression of smell. Let the cells bearing these impressions become quiescent, then imagine a motion again reaching any one of them, its impression will be renewed, and that of the other two will again and speedily follow; thus it would appear that every idea we have in our memories has its location in a certain number of impressed cells close together. If now we allow, in our supposed brain, the impressions of the rose-tree to follow those

of the rose, the activity of the cells bearing the impressions of the rose will be followed by the activity of those bearing the impression of the tree ; and it is this process, occurring in our brain when healthy and, of course, stored with its multifarious impressions, that gives us the phenomenon of mind which we call relative suggestion. Complex as are the ideas in all ordinary minds, their reproduction is always more or less in order ; and although the greater the number of impressions that our brains bear the greater and more multifarious will be the ideas we remember, yet on analysis of our thoughts we shall find that they always follow some order, and we may trace back each idea to some other intimately related to it ; thus, in the healthy brain, thought occurs in a sequence of ideas, each idea being suggested by, and more or less relative to, the one preceding it, or at all events related to it by association or by the order in which its impressions were first received. We see a lamp—we have the idea of light ; light suggests the sun, the sun the sky, the sky astronomy. In this we see in its most simple form the manner in which in the complex workings of our daily thoughts the multitudes of impressions that pass in review are called up ; motion from one active cell being communicated to others in natural order, as motion is communicated from atom to atom of metal when a current of electricity passes through a wire.

The second phenomenon of mind or judgment I will here merely touch upon in its physical aspect, being desirous to leave all metaphysical considerations out of the paper as far as possible. A new impression in a cell is immediately brought into relation with the memories, motion being necessarily communicated from a newly impressed cell to others located in or near the same spot : this allows that comparison of impression with impression by which the new one is corrected, the process by which in the lowest degree simple ideas are formed, and by which in the highest degree we have that affirmation or negation of idea about idea which constitutes the function of mind called judgment.

The same process occurring in many cells, and taking place in a brain stored with many impressions and ideas, whereby the phenomenon of sequence is sufficiently perfect to permit two or more in juxtaposition to be prominent, allows that inference of one judgment from several which constitutes that faculty of the mind which we call, in its logical term, reasoning.

I would here cite music as a very remarkable instance, and

perhaps the most simple illustration of the identification of mental phenomena with the physical effects of motion. It is incontrovertible that music is a modification of motion, which reaches the aural organ of sense in waves, varying in rapidity, called sound. The reception of the impression by the brain is one factor of the vital phenomenon—the resultant of the motion of those waves of sound which reach certain cells from the aural sense organ, and the potential energy of those cells.

The cerebral cells which bear the impressions of the vibrations that produce sound are arranged in such exquisite relationship to one another that musical notes take their place in *ordo naturalis*, and in the simplest idea the notes of an octave can only follow one another in a sequence; and the fact that the reproduction of the impression of one note will immediately be followed by the remembrance in natural order of all the remaining notes either higher or lower in the scale of that key, directly points to the conclusion that the same influence which aroused the activity of the cell bearing the first impression has passed on to those cells bearing the impressions which appeared secondarily; and if we admit the influence of the first impression to have been motion, the conclusion is inevitable that that of the second is motion also, and that a proportion of that motion which aroused the first impression passed onward to the cell bearing the second.

We may pursue these phenomena further by considering the relation which certain members of the order of musical sounds bear to one another. If we take the common scale of C, or the natural key, the sounds that we call C D E F G A B follow one another in a sequence; but though this is the most simple, yet it is not the only sequence, for certain of the cells bearing these impressions appear to have secondary relationships—thus the 3rd, the 5th, and the 8th or 1st notes of the scale bear so close a relationship that if the 3rd be struck the others will follow in the mind as conclusions of an *a priori* character; or if all the three notes are struck together they agree, or judgment affirms their relation, and we are conscious of harmony, or, if struck in a sequence, we are conscious of their natural and harmonious association. Again, if we sound the 4th, the 5th, and the 7th, we are again conscious of something like harmony; yet not perfect harmony, for the mind is not satisfied; and although we have what musicians call an essential discord—although judgment affirms somewhat, yet the affirmation is incomplete—the

essential discord stands as it were a low barrier midway between two ideas, for judgment is satisfied the moment the relative harmony—composed of the 1st, 3rd, and 5th, or the 3rd, 5th, and 8th—is again struck. So absolutely irresistible is the return to the harmony after the essential discord that it may almost be regarded as a necessity; in fact, in some highly trained musical minds so absolutely a necessity is it that after the striking of any essential discord a painful impression remains until the discord has been resolved. It would be not unreasonable to assume that the motion affecting the cells in the production of the first impression of harmonious sounds when diverted from its natural channel, so disturbs the normal quietude of other cells that the painful impression occurs from their incongruous agitation, which remains until either the motion inciting them is expended, or is again turned into its natural channel. Before the final harmony is struck, any variety of concatenation of musical notes may be introduced, in the same way as a sentence may have any number of parentheses, so long as it has its logical conclusion or sequence. It is upon this that the beauty of music depends; but whatever the number of interpolations of concatenations, and however harmonious these may be, it is none the less necessary for the final harmony to be struck before judgment is satisfied. The affirmation of idea about idea is thus the harmony of impressed cells, a current of motion reaching a cell, bringing all its relations into activity with it in their natural order, and without producing any painful or inharmonious vibrations.

I would next illustrate the idea by consideration of one of the other senses, and I think we can have few stronger evidences than those, both positive and negative, of change in the material brain, associated with the impression and retention of words. I have not any intention of here entering upon the subject of Aphasia beyond the evidence afforded by it that language, or the impression of words, has its localization in some particular spot in the brain, which spot we may call the language, or the *word-holding*, organ.

It is certain that every word that has a place in that organ must have made some alteration in a cell before its identity could have become indelibly traced in that cell, or before its entity could have become a part of the entity of the particular cell that bears it, and it is equally certain that the alteration is induced through the agency of motion. We gain our experience of words—firstly, through the medium of

sound; secondly, through the medium of that mode of motion we call light. The impression of words from sound is exactly similar to that which we have seen in the case of music; certain waves of vibrating atoms impinge on the organ of hearing, and thus set up a motion which is conveyed to the cells which are the centres for the reception of verbal speech.

The inception of words through the agency of light is almost precisely similar, varying only in the mode in which the motion originated. We see a written or printed word because certain waves or rays of light so impinge on our retina as to reproduce in it the form of the written or printed sign; these rays of light are incontrovertibly motion, and the motion thus communicated to the retina is conveyed through the nerves to the recipient organ of verbal impressions, then meeting with the potential energy of the cells inducing the chemical and impressive change and also the third change, as we have already seen. So long as the seat of verbal impressions remains healthy, the various motions of the mind will call into prominence whatever word is wanted to express an idea, provided the *word-holding* organ possesses such a word, or provided that some cell bears the impression of the word associated with the idea; for instance, we see a rose, we have a mental impression of the flower, and we instantly give it its name; perhaps from habit—at all events from education—we always associate names with persons and things, and words with ideas. So that when we look at a flower we have seen before, the cells bearing the impression, instantly communicating with the word-holding organ and exciting it, we remember at once the name; and this, like the sequence in musical notes, always occurs in natural order. If, however, we look at a flower we have never seen or heard of before, or of the class and order of which we know nothing, we cannot associate a name with it, because in the word-holding organ there is no word related to the mental impression of the flower, and therefore none to be called into remembrance by it; the motion, communicated to the brain by the sight of the flower, merely induces the impression of form, size, colour, quality, &c., and any attempt to associate it with a name with which we are familiar will be negatived by the reproduction of a mental impression of the flower associated with that name.

The same phenomena are to be traced in consideration of all the sense organs. The sense of touch also as certainly gives us various impressions of the relation of bodies to space;

affecting cells which in their natural order are aroused by the activity of the cells bearing the other sense impressions of the body, in contemplation the revival of all the elementary impressions, formed through the medium of the various senses, and giving that complete idea, which for the want of one of the simple impressions might be warped, narrowed, contracted, or exaggerated. So certainly are the impressions ascribed to touch the results of motion, that this sense requires no further demonstration.

The evidence afforded by diseased conditions is very characteristic, especially where comparison can be drawn between the mental phenomena during life and the condition of the brain after the death of the individual. If our proposition be true in every case in which the maintenance and nutrition of the surface cells* is perfect, we ought to have retardation, imperfection, or arrest of the normal phenomena, varying, of course, in every shadow of degree with the loss of conductive power or the degree of tissue change in the brain itself.

If we measure the rapidity with which an electrical current will pass through a certain length of copper wire, then cut out a portion of that wire and introduce in the gap an equal length of platinum, an alteration in the rapidity of the current will be discovered, and if we substitute glass instead of platinum, the current will be found to be altogether arrested. So also in the brain substance; any alteration in the normal constitution of the cells or fibres will retard or arrest the motion communicated from externals,† while the greater or less degree of absence of potential energy in the cells themselves is fatal to the production of perfect impressions. We have, in consequence, but fleeting and imperfect images, loss of memory, sometimes apparently inordinate impressions, loss of attention, and incoherence. In

* There is ample reason to believe that the seat of intellectual impressions is the surface of the brain, since its internal parts are ganglia presiding over special and definite functions. It is almost unnecessary to state that these cells vary in their form and in the number of fibres they give off, that they are connected together by fibres, and also that certain of the fibres which they give off form the white matter or material of connection between surface and ganglia.

† This idea has been objected to on the ground that electricity passes with equal rapidity through all kinds of brain matter, whether diseased or not. It must, however, at once be seen that such objection is untenable and illogical. Vitality is not electricity, and an atrophic or fatty cell certainly has not the same amount of potential energy as one that is healthy and intact.

almost all such cases, especially those in which loss of the faculty of attention is a marked characteristic, the prominent physical condition of the brain is that of atony ; and the fact of the loss of potential energy depending upon this change is an almost daily observation, not as regards the brain only, but as it affects every tissue of the body. Still more evident is the loss of potential energy in atrophic or wasted cells, or in amyloid cells and fatty cells in which the atomic elements are either not replaced or else amyloid particles or fat globules are substituted.

Some very strong evidence may be obtained from an analysis of incoherence of thought as manifested by incoherence of speech. In the delirium of fever, the confusion of some of the commoner forms of insanity, and the meaningless chatter of delirium tremens, a patient will often constantly repeat two, three, or more sentences which have not the least apparent connection ; other patients of the same class may be observed to commence a sentence, expressing some of the simpler ideas in their natural and logical sequence, and then suddenly to lose the thread and continue or finish his sentence upon an entirely different subject ; sometimes the thread of the idea will be lost twice, or three, or more times, the utterance being disjointed, part sentences, without regard to beginning or ending—or should he be capable of writing, his productions will be a string of incongruous, extravagant phantasms, or wild, unconnected, and fractional imaginings ; but a closer study of such cases will show that the most incongruous and unconnected of these ideas are not altogether free from connection, and although often very widely disjointed, a slight web of connection may be traced through the whole of any particular set of wanderings, and it would appear as though, in the case of the unfinished sentence, the current which aroused some few ideas in natural sequence had suddenly ceased ; or in the case of disjointed sentences, after waking into quasi activity a few cells in natural order and relation, reaching others more healthy, *i.e.*, with more potential energy than those immediately before excited, it had darted off, at a tangent, as it were, in the direction of the greatest vitality, waking impressions in natural sequence only so long as the cells bearing sequential ideas were more perfect in their physical constitution than others in proximity. There will generally be found some slight connection between the antecedent impression and the new idea, for the current can only run from one cell to another in con-

nection with it, although the extremes of the divergence of ideas following the relation of suggestion in two directions, but starting from one simple impression, may be so wide as to appear altogether without relation. It is perhaps owing to the facts, firstly, of each individual gaining his impressions in a different order to another, and secondly of the variation in individuals of the number of new impressions which may at different times be communicated from any one external object, that we obtain so great a variety in the sequential impressions and ideas of individuals, and so endless and so infinite a variety in the ideas one object may create in the human mind. A current of thought starting from an impression newly made or reproduced in any cell runs in one or more definite courses, but not necessarily always in precisely the same; were this the case, thought would be finite, narrow, and contracted, and confined to repetition ; traversing and re-traversing a beaten track, as is the case with some lowly organised minds. We cannot interrupt the sequence any more than we can intercept the current of electricity in a wire, except by directing the current into another channel ; that is, we cannot prevent the reproduction of impressions when a current has once started, except by placing another object more prominently before us, and thus directing the motion into another channel ; but we have the power of continuing the current of thought in any channel or in any number of channels that may proceed from any given impressed cell for any length of time ; the only limit to the ideas which may be suggested by any one given object or idea being the limit of our experience, or the paucity of cells bearing impressions relative to that particular object or idea. It is from this cause that thought can only follow the law of relative suggestion, for, unless we except transmitted memories or impressions, we have no innate ideas. Creation of ideas, except from the balancing of impressions already fixed in our brain cells, is as impossible as creation of matter. We are enabled to place new objects before our minds, either through the medium of our senses, or our recollection, whenever we will to do so, and as the motion set up in the reception or remembrance of an impression passes from cell to cell, it wakes, as it were, and makes prominent in these, the impressions which they bear ; impressions perhaps long dormant, but now called forth for comparison, or judgment, or reflection, or to serve some office in the train of thought.

In the healthy brain activity can be maintained very well,

and, as it were, restricted for a time among certain sets of cells, the potentiality of the restriction constituting the faculty of attention, and the more perfect the quality of the cerebral substance, the greater is the possibility of developing this faculty. We can listen attentively to one person, and keep the current of thought intently fixed upon the subject of the speaker till he ceases, or until we are interrupted by a second person, in which case we can afterwards return to the first and reproduce the impression formed by his subject as though we had had no interruption. In a perfectly healthy brain, also, we can maintain and hold the impression of a given object the most prominent of all impressions till the cell or cells bearing it are tired or exhausted, or till the material atoms of the cell are so far changed that no further motions can occur till the cell is renovated. Hence we see the necessity for rest as well as nutrition, in the healthy action of the brain, the rapidity of nutrition not being able to keep pace with the exhaustion consequent upon attention. We are able to place a new object before our minds whenever we will and concentrate our attention upon it, and as we have not two attentions, and can only reason about one object at the same absolute moment—for when we seem to think about many things at once, we do not actually, but merely allow various objects to pass before us in rapid succession—it follows that the power of our mind will be the greater the more perfect our faculty of attention, while the loss of this faculty, or of the power of exercising it, constitutes the ruling abnormality in a large section of those individuals we call insane, in whom it is exhibited in the several forms of incoherence. In the abnormal brain, no permanent impression can be made, as little or no change is possible, a current cannot be maintained among any one set of cells, no perfect idea is formed, and the thought is lost—lost because the current which started it has reached a cell almost inert, or else, having been diverted into another channel, it has produced an abortive idea and abortive sequence, as fleeting and imperfect as the one before it. This phenomenon is strangely analogous to the phenomenon of dreaming—a state in which the faculties are almost all in abeyance, but in which some wakeful cells revive their impressions, while currents maintain errant courses without restraint or control, and wander far and wide over the broad and open area of that cellular structure which bears these wonderful, vivid, but as yet inscrutable impressions.

The close and parallel conditions of dreaming and incoherence is no new idea, but was recognised long since—by poets, however, rather than physicians. Tennyson beautifully illustrates this in his *In Memoriam*, as “the kinsman of sleep and madness.” McNish, in his “Philosophy of Sleep,” advances this idea, which has become very generally recognised by psychologists.

But again, accepting our proposition of motion, we find negative evidences of its truth in loss of memory, a condition in which no permanent impression communicated through a sentient nerve makes a lasting impression upon a cell. The individual in such a case will see, but not observe, and the passing objects of the present will find no place in his mind. Attention, if possible at all, will be a great effort, and even if the effort be made, will be followed by a speedy forgetfulness of all the attendant circumstances. Such cases are common enough, and exactly illustrated by general paralytics and demented subjects, in whom the only condition of brain cell we, as a rule, find after death, is atony or atrophy. In such cases, during life, the mind often becomes a perfect and complete blank. But since we do find the condition so constantly, and since we admit from actual experiment that in health the brain cells receive communications from externals through the agency of motion passing as currents through the sentient nerves, it follows that in these cases the cells themselves must be incapable of undergoing that change which is necessary for the production of impressions, therefore that their vitality, or potential energy, is diminished, and therefore, also, that they are incapable of communicating the motive currents further, or much further, to the cells in immediate proximity. The same conclusion is to be drawn when inordinate impressions are formed, giving the idea of hypercharactration. Such hypercharactration, however, often appearing as inordinate attention, is only apparent and is not voluntary, and results from the atonic cell retaining a sufficient amount of its normal element to admit of a primary impression being formed, but not sufficient to allow the current to pass on and arouse secondary and corrective ideas. Hence we have a strong impression, but no judgment. A few cases illustrative of this would help to elucidate my point, but as my space is limited I must desist, though I feel convinced that the more we examine clinical cases and accurately analyze both the single, prominent, and strong impressions, and the incoherent gibberish of unsound minds,

we shall not only learn much of movements of the mind, but in the beautiful and delicate structure of the human brain discover much to elucidate the objective and subjective phenomena of vitality, and the more confirmatory still will be the evidences that we are dealing with a mode of motion. So strangely in relief, however, do the single delusions sometimes stand out, on account of the inactivity of perhaps almost all portions of the brain, except that associated with the one idea, that it is not perhaps surprising that the idea of monomania should have at some time crept into psychological medicine. A little careful examination and study will, however, often indicate the exciting cause of such delusions, all of which have their origin out of, and not within, the brain. I could detail several cases of singular interest, had I space. I will merely mention one in which the patient believed that he had no bowels; the delusion was easily traceable to ten days torpidity of those organs, which, when relieved, was followed by a delusion that he had neither bowels nor sphincters, because for a day or two after successful evacuation he was unable to control his dejections. The evidences in this case were those of mal-nutrition. The patient perfectly recovered. Among other cases I might mention from my own observation, are several in which patients have believed that they had small animals in their insides, as instanced in one in which the delusion was that of a little dog in the stomach (abdomen). These cases I have generally found to be in female subjects; all of them cases of mal-nutrition, and the exciting cause of the delusion ovarian irritation.

The phenomenon of morbid speech again affords a strong confirmation of the truth of the theory of motion in its relation to mental activity. Misplacement of words, such as we sometimes notice when a person is impelled to use expressions conveying exactly the opposite meaning to that which he desires, as for instance characterising a fine day as a wet one, and *vice versa*, miscalling names, as instanced in addressing the male members of a family by the names of the female, and *vice versa*; or again, those curious cases as illustrated by that authentically related of a lady who, in repeating the Lord's Prayer, was impelled irresistibly to say, "Our Father, which art in Hell;"—seem as strongly significant of imperfect conduction and imperfect motion among the atoms of the nervous fibres and vesicles, as it is significant of a partial loss

of vitality of those particular structures, which no one probably will feel inclined to question.

There are on record several remarkable instances in which the phenomenon of morbid and perverted speech has been followed by cerebral haemorrhage, right-sided hemiplegia at length explaining the anomaly, as it probably may in many similar cases, confirming a suspicion of a slow and progressive change in the vessels, accompanied by a slow and equally certain change of the cells in that immediate part of the brain. An arrest of their nutrition, a diminution of their potential energy renders them incapable of that perfection of activity necessary to revive or reproduce the spectrum of the word that an idea, or person, or body should have called forth or suggested.

The same phenomenon is not unfrequently the precursor of an epileptic seizure, the impoverishment of the brain tissue and the imperfection of the vitality of the cell in this appalling malady being incontestable. In these cases; various forms of illusion and subjective phenomena, as the ideas of soft breezes, or small animals running up the arms or legs or back till they reach the head, or perversion of vision, or smell, or taste, are all confirmatory of the diminution of vitality of the brain, and the impossibility, while the brain is passing into that anaemic condition, which is the proximate cause of the epileptic manifestation, of motion passing onward from the impressed cell to others, the revival of the impressions in which might, to use the metaphysical expression, correct the impression of the one that is active.

It will now be my endeavour to consider whether any practicable application of this theory may not throw some light upon that class of disease which we term subjective, all forms of which, I believe, can be traced to an arrest or absence of that motion which we term potential energy or vitality.

In dealing with disease, the error into which physicians for a long time fell was the one that now constitutes the popular notion, viz., that disease has an existence *per se*, that it is an entity separate and distinct from the individual it affects. It is of high importance, therefore, that in the investigation of the nature of disorder we should clearly conceive that we are dealing with a condition. The popular notion is that disease has an existence *sui generis*, and stands in the same relation to the individual as the medicine given to cure it. Disease, however, has no existence other than the modification of the organ or organs it is attendant upon.

This is, perhaps, especially true in regard to pain, spasm, convulsion, epilepsy, and nervous disorders generally. We are in the habit of classifying symptoms as subjective, when we cannot discover any material change in structure, and objective, when we can discover such tissue alteration ; but it is nevertheless certain that whatever be the symptoms and however inscrutable and fleeting the tissue changes may be, there must be changes, otherwise we should be arguing for effects without adequate cause.

Observers long ago determined that the class of diseases characterised by pain, spasm, and convulsion, were due to over action, and it is strange how pertinaciously the opinion was long adhered to.

When the writhing agony of tic, the violent spasm of tetanus, or the haemorrhagic congestion of the second state of epilepsy are witnessed it is not perhaps to be wondered that the *prima facie* inference should have been undue excitement and over action ; but it is evident that such an idea would never have been formed had all the phenomena been carefully noted, and the evidence afforded by each carefully weighed.

Again, in what is termed nervous excitement, as instanced in the delirium of fever, the restlessness of delirium tremens, and the apparent over-action in several forms of insanity, particularly in paroxysms of mania and the excited stages of general paralysis, the ultimate exhaustion renders it evident that the over-action was not real, but due to the arrest of the activity, or the diminution of the vitality of those cells wherein the function of control is vested, thus allowing the potential energy of others to expend itself rapidly till they reach the state of stasis, or are exhausted ; being analogous to a watch, in which we have removed the hair spring, when the machinery rapidly performs its revolutions until the potential energy of the main spring is exhausted, and then it stops.

It may be laid down as a rule that the amount of action the muscular system is capable of performing, and the amount of control which the central nervous system is capable of exercising, are in the healthy animal accurately and perfectly balanced, while any undue excitement visible to us in the former is to be received as evidence of a diminution of power or loss of vitality in the latter.

In endeavouring to find an adequate cause for perverted nervous function, and after a careful examination of a large num-

ber of cases and the lesions associated with them, I became the more convinced that in nervous disorders, especially those characterised by pain, spasm, and convulsion, we are dealing with a definable, physical condition. I have no objection to the use of the term subjective, as far as the actual manifestations or resultants are concerned; but we must go further and consider the objective, and I feel some certainty that we shall discover that objective in a change of the material of the cells of the brain, whereby their potential energy is so diminished that perfect vital phenomena cannot occur.

In those disorders in which paralysis is the prominent characteristic, the arrest of motion is so evident as to require no further demonstration, and in such cases, after death, we usually find sufficient tissue change in the brain to account for the arrest of function during life.

In those disorders, however, in which convulsion and spasm form the prominent characteristic, the arrest of motion is not always evident, and a closer scrutiny is required in order to render it so. In the passive form, and in the first stage of epilepsy, the almost suspended animation would point to a general arrest or diminution of potential energy, but the second stage would seem to point to the opposite conclusion, and therefore it is necessary to investigate all the conditions more closely.

After searching closely the records of inspection, during ten years at Guy's Hospital, with a view to discover a cause, and to fix the seat of lesion attendant upon convulsive disease in some definite spot, I was forced to the conclusion that there was no definite spot to which the attendant lesion of epilepsy might be referred, and though serious lesions are, in a great many cases, to be found on the surface of the brain, yet, often, no lesion that is at once demonstrable is discoverable at all, and when lesions which could not fail to attract the eye have occurred, they have so varied in their position, that, although they might have been an indirect cause, they were not the proximate cause—the *fons et origo morbi*; and while we regard morbid appearances after death, and endeavour to associate them with the morbid phenomena during life, we must not forget that many of the pathological changes which we see are often secondary, and the result, rather than the cause, of the affection. Instances of chronic Mania, Idiopathic Epilepsy, and progressive Locomotor Ataxy constantly furnish evidence on this point.

The mass of material that I have collected in regard

to epilepsy, however, furnishes very conclusive evidence upon two points ;—1st, that the primary seat of lesion is the surface; 2ndly, that the immediate exciting cause of the attack is anaemia of the surface. I have endeavoured to show that in health there is a perfect relation or balance between the control residing in certain cells of the brain and the contractile power vested in, and the attribute of, the muscular system, also that the seat of control, as also necessarily of volition, is the surface. If, therefore, any motions occur in those certain surface cells which have relation to volition, activity in the cells of the motive ganglia with which they are connected follows, whereby a disturbance of equilibrium is induced, and a condition analogous to electrical discharge ensues. The disturbance of the equilibrium of the motive ganglia arrests the control which these so called motive ganglia have over the muscles, with which, through the nerves, they are connected; a current then passes through the nerve from the muscle, resulting in a contraction of the latter. Muscular contraction being the temporary removal of that control whereby the muscle is retained in a condition of static tension or equilibrium.

It is perhaps as well here to notice the fact discovered by Galvani, and afterwards established beyond doubt by Nobili, of currents passing along nerves in the direction from the periphery to the centre. It was, however, long the notion that currents passed in two directions—viz., from the periphery to the centre conveying to it impressions, and from the centre to the periphery conveying mandates or stimuli to the muscles, which then contracted from an inherent property of contractility.

The experiments of M. Matteuci, in 1842, and those of Professor Du Bois-Reymond, have however, proved beyond all question that in the contraction of a muscle the current passes not from the centre to the muscle, but from the muscle in the direction of the centre.

The experiments of Du Bois-Reymond and those of Dr. Radcliffe show that during inaction the natural state of living muscle is one in which the longitudinal and transverse surfaces of the fibres are in a state of (electrical?) antagonism, the longitudinal surfaces being positively and the transverse negatively electric, while the state of action or contraction is a condition of discharge.

As regards the nature of the currents they have been considered as electrical by the numerous experimenters who have specially studied them ; there is, however, no evidence to show

that the force inherent in the muscle is electrical, though no doubt electricity was what the experimenters dealt with, and measured with their galvanometers.

Their experiments, nevertheless, show that they were dealing with a mode of motion, and this mode of motion which is inherent in the living muscle and manifests itself as life, was converted into or manifested as electricity in their experiments, and at the time that they measured it by the galvanometer.

If the vitality of the surface cells is diminished, their controlling influence is diminished also in a corresponding degree. Contraction may then occur in the muscles, and continue till the amount of muscular exhaustion balances the amount of potential energy wanting in the cells, when equilibrium is restored, though often the subject is left feeble and requires rest and sleep for the renewal of potential energy.

In the set of cases associated, for instance, with tumours and pressure, certain surface cells are completely destroyed, while those immediately surrounding are, some in an atrophic, and others in an atonic condition, and though there may be sufficient potential energy in the remaining cells to exercise perfect control under equable and passive conditions of the organism, a very slight amount of activity or excitation, induced either by external impressions or mental exertion, will so diminish their control over the muscular system that muscular discharge will of necessity follow, and in degree varying in proportion to the amount of brain surface affected and the amount of control deficient.

It is, however, certain that epilepsy occurs in two distinct forms—*Le grand mal*, and *le petit mal*—the variation resulting accordingly as the motive ganglia or the general surface of the brain are more affected.

In *le grand mal* any excitation of the motive ganglia under certain conditions of exhaustion instantly induces that anaemia of the brain which is the immediate cause of the loss of consciousness, and for a longer or shorter time the whole organism remains in a condition of tonic spasm. As the blood again begins to circulate through the brain, the tonic spasm passes off, because general control is more or less restored, and sometimes partial consciousness with it; but special control, that which possibly should be seated in a particular spot which is disorganised, being incapable of restoration, or incapable of speedy restoration, a series of muscular discharges, or that which we know as clonic spasms occur, until the potential energy of muscular and nervous systems respectively balance one another.

In *le petit mal*, the primary seat of affection appears to be the general surface, while the motive ganglia are but little affected; the anaemia of the brain, induced by any excitation, may be followed by slight spasm, and the muscular control may be almost immediately restored, while the mental faculties may remain for a long time altogether in abeyance, or they may be partially restored, under which condition we may witness the most strange and extraordinary instances of mental perversion which ever pass under the observation of the physician.

By entering fully upon the subject of epilepsy generally, and especially in regard to *le petit mal*, I could bring forward a mass of most interesting facts, all of which would support and illustrate the proposition of motion I have enunciated in regard to vital, mental, and cerebral phenomena: the subject of negation and perversion of mind attendant upon *le petit mal* is, however, so large that it is more fitted for a separate paper, and one which I hope to be able before long to bring forward. The conclusion, nevertheless, to which pathological observation points is the same as that indicated by clinical observation—viz., that *le haut mal* or *le petit mal* are phenomena which are produced according as the centres of intelligence or the centres of muscular control are primarily the seat of lesion or affection. The loss of consciousness is usually the subjective phenomenon first appreciable to the observer, but its occurrence is secondary altogether, and the result of the anaemia of the brain, which again is secondary to and the result of contraction of the capillaries of the brain, which contraction is itself the result of irritation, caused by exhaustion; the brain cells themselves wanting potential energy to enable them to antagonise the currents produced by external objects or the ordinary motions of the mind.

It would almost appear as a conservative effort, that the capillaries contract because the cerebral cells are exhausted and irritated; loss of consciousness follows from the absence of so much blood in the brain as is necessary for the maintenance of the motion of thought, and the chemical phenomena associated with it; next, control being removed, the potential energy of the muscular system is able to expend itself; and lastly the relation between the control of the centre and the potential energy of the muscular system becoming equalised, the exhausted subject is enabled to rest, and therein to recover potential energy in both nervous and muscular systems.

The Perceptive Centres and their Localisation. By the Rev. W. G. DAVIES, B.D., Chaplain to the Joint Counties' Asylum, Abergavenny.

THE cerebral anatomist, if destitute of any leading idea as to what he should be searching for, must be labouring under considerable disadvantage when he examines the intimate structure of the brain; and since the study of his choice must, from its peculiar intricacy, demand his best attention, he cannot be expected to be as profound in his psychology as he is in his anatomy. "It is interesting to remark," says Wagner, "that wherever an insight into the nature of the functions performed by an organ has been wanting, there has the structure also remained more or less obscure; we feel the want of everything like a guiding principle in the anatomical inquiry; of this truth we have satisfactory assurance in the cases of the thyroid, thymus, and supra-renal bodies and spleen."* Then, as regards the psychologist proper, if he devotes his days and nights to the analysis of the mind's conscious and expressed operations, it is not in human nature that he should be a professed and original anatomist as well. Indeed, division of labour is more necessary, perhaps, in this obscure field of research than in any other. Now, it is as a psychologist who, in the interest of truth, has deemed it his duty to explain mental phenomena in such a way as to be in harmony with the ascertained structure of the brain, that the writer offers the following remarks, hoping that they may not be unserviceable to the cerebral anatomist.

We offer this paper as a sequel to our last,† and the reader's attention is invited, in the first place, to what was therein propounded as to the nature of Perception. This mental operation is considered to be, so to speak, a bi-une process, involving the action of a sense-centre together with that of an intellectual centre or centres. As soon as a sense-centre ceases to act, while the intellectual centre or centres continue to do so, what is experienced is an idea or notion of what had previously been presented in sensation, which is considered to be simply presentative consciousness or concrete intuition, in

* Elements of Physiology, Willis's Translation, Part III., p. 606.

† Journal of Mental Science, October, 1868.

other words, the object of the many. A tree, for instance, as seen by us, is sense-consciousness alone ; and if we can say that the tree does not know, that is, perceive, conceive, and remember, so also are we justified in saying that sense-consciousness does not exhibit these purely intellectual powers. The sense-centres, then, simply present an object ; the intellectual centres analyze that object in the manner to be explained below.

Seeing that sensation is a kind of consciousness, and yet does not amount to knowing, it is desirable to mention that the term consciousness, though used by many metaphysicians as synonymous with intelligence, may, with greater accuracy be confined to a lower signification. Consciousness appears to be the most appropriate word in our language to express all that the mind reveals or manifests. Thus, sensation and emotion are kinds of consciousness ; they present, but inasmuch as they cannot be said to be knowing operations, since they do not discriminate in time, they cannot be called intellectual actions of the mind. Consciousness, therefore, would be appropriately regarded as more generic than knowing or intellection. It should be correct to say that all intelligence is consciousness, but not the converse.

We now propose giving a condensed account of some of the laws of thought, primitive and derivative, and pointing out, as we proceed, which of these involve separate seats in the cerebral hemispheres, and which do not.

In the first place it is known that the organ of smell is connected, by means of nerve-fibres, with the olfactory ganglion, which is concluded to be the olfactory sense-centre ; that the organ of hearing is similarly connected with what is inferred to be the auditory sense-centre ;* and the organ of sight, with the corpora quadrigemina, which are concluded to be the visual sense-centre. Although the remaining organs of sensation have not yet, so far as we know, been discovered to be in connexion with any special ganglion, it is, nevertheless, fully believed that such is the case, and that eventually the anatomist will be able to establish this as a fact. † One advance made in this direction is that by Dr. Brown Sequard, who states his view of a certain point as

* Researches on the Intimate Structure of the Brain. By J. Lockhart Clarke. Second Series—Of The Auditory Nuclei and Nerves.

† The Physiology and Pathology of the Mind. By Dr. Maudsley. Chapter IV. Sensory Ganglia.

follows :—“ We think, and for many years already have tried to prove, that the nerve-fibres employed in the transmission of each of the following sensitive impressions are as distinct one from the other as they all are from the nerve-fibres employed in the transmission of the orders of the will to the muscles. Of the three hypotheses that may be made to explain a loss of one or of a few only of the following sensations, there is but one which agrees with the facts at present known ; and we repeat that this one is, that the conductors of the various sensitive impressions are distinct one from another. The kinds of sensitive impressions which have different conductors are those giving the sensations of *touch*, *tickling*, *pain*, *heat*, and *cold*, and the peculiar sensation which accompanies muscular contraction.”* Now, if this be a true statement of the facts, it is evident that distinct centres have to be sought for these impressions ; and two of these centres, that for touch and that for the peculiar sensation which accompanies muscular contraction, are of very high importance in the intellectual economy, since it is to them we owe our knowledge of the extended and the solid. Now, since nerve-fibres are known to proceed towards the cerebral hemispheres, from such sense-centres as have been discovered, and from the other bodies at the base of the brain, it is highly probable—and the laws of thought seem to demand as much—that each sense-centre is in immediate connexion, by means of the nerve-fibres passing from it, with a certain portion of the cortical surface above, such portion forming its intellectual centre. According to this hypothesis, there are first a *sensitive* and then an *intellectual* centre attached to each of the organs of sense ; and the latter, except when occasion arises for clearly distinguishing it from its related sense-centre, may be appropriately entitled a Perceptive centre.

Dr. Charlton Bastian has independently arrived at views very similar to these, and we sincerely hope that his superior opportunities, and intimate study of anatomy, will enable him to throw considerable light on this important question.†

For the better understanding of this examination, we would draw attention to the fact that thought moves in two categories. :—

* Physiology of the Nervous System. Lecture VII.

† Dr. Bastian has, of his own accord, explained that the views advanced by him in the January number of this Journal were in print before he had any knowledge of our article in the previous number.

The Category of Difference.

Differentiation
or
Discrimination.
Definition.
Division (logical).
Law of Contiguity.
Connotation.
Whole of Comprehension.
Analysis (of a Whole of Comprehension into its parts or qualities by predication).

The Category of Resemblance.

Identification
or
Assimilation.
Generalization.
Classification.
Law of Similarity.
Denotation.
Whole of Extension.
Synthesis (of individuals into a Whole of Extension, by noting their likeness, and bringing them under one name.)

We have selected the above terms without attempting strict accuracy as to their opposition and order, simply to mark out the leading features of each of the categories ; and it must not be supposed that there is a decided separation in thought between the one class and the other. Did space allow, it could be shown how closely interwoven these contrasted operations are ; and, as it is, we shall have to show that, independently of each other, the two categories, in so far, at least, as they include the elementary laws of thought, cannot exist.

Accepting the physiological theory that all thought is preceded by cell-action in the ideational centres, we go on to show what the fundamental laws of thinking are, and wherein they involve a separate seat in the brain, and wherein they do not.

Two indispensable elements of all thought are *discrimination* and *identification*. An object, as presented in a sense-centre, is cognized by the related intellectual centre as a whole. This whole is discriminated, 1st externally, from other wholes presented by the same sense-centre ; 2ndly internally, from the qualities which compose it ; 3rdly, these qualities are distinguished from each other. There are various links between a whole and the qualities which can be predicated of it ; but the fundamental and invariable link is contiguity in time. Objects perceived together or in immediate succession are apt to cluster together in the same order in memory, and form wholes of thought. Thinking mainly consists in analyzing these wholes, and is expressed in language by the proposition or asserting sentence. The subject of the proposition invariably represents the whole about which we are thinking ; the predicates which may be asserted of the subject, the positive or negative qualities and relations of

such a whole. When a proposition simply unfolds the contents of the subject, it is called analytical; when it adds to these, synthetical. Now, it appears to us that when a proposition is analytical, there is no cerebral action involved in the predicate-notion other than that which is involved in the subject-notion. In the synthetical proposition, however, it appears that there must be cell-action in addition to that implicated in the subject-notion. In the former case, given the subject-notion, the predicate-notions are already given in it; but in the latter case, the subject-notion summons up the predicate-notion in some other seat of the brain. The laws of mental succession as relating to different thoughts following one another in chronological order, come under this head alone. "Thoughts," says Hamilton, "are dependent on each other, only as they stand together as relative parts of the same common whole. This may be called the Law of Relativity or Integration."

"But this whole is of *two* kinds. It is either an *objective* (necessary and essential) unity, constituted by and intrinsic to the thoughts themselves; or it is a *subjective* (contingent and accidental) unity extrinsic to themselves and imposed on them by the mind—the mind in general. In the former case, a certain thought being given, it *necessarily, of, and along with, itself evolves a certain one exclusive other*; in the latter, a certain thought being given, it only moves the mind, according to definite subjective laws, to pass on to this or that of a certain plurality of others. In the one instance, there is a determination to an individual consequent; in the other, only a determination to a class of consequents, the preference of this or that class, or of this or that individual under it, being regulated by circumstances, external to the nature of the antecedent thought itself. The former constitutes what may be called the *logical* or *objective*; the latter, what may be called the *psychological* or *subjective* train of thought."* The logical train involves no other cerebral action in the conclusion than that already involved in the premisses; in the psychological train the consequent involves action in some other seat than that concerned with the determining or antecedent thought.

In order, however, that a whole may be cognized by the discrimination of its parts, there must be continuity of this cognition in time, or the cognition of the present moment must be identified in thought with that of the latest, later, late past, &c. Let the beginning of a flow or succession of

* Hamilton's Reid, p. 911.

thought be A (for all thought is a flow, “and every consequent modification in the mental train is the effect of that immediately antecedent”),* then as the same thought continues, we have A + A' + A'' + A''', &c. Each thought leaves its traces or residua behind it, and the stronger these are, and the more they are accumulated, the firmer is the thought retained, and the greater is the force and aptitude stored up in the cellular neurine concerned. Now, as to localization, this identifying of a present thought with its past involves precisely the same seat as the thought in its discriminating aspect does. While, then, distinct Perceptions involve separate seats, the continuity of a Perception in time does not, for it merely implies continuance of action in one and the same Perceptive centre.

An easy method of elucidating how far perceptions suppose distinct seats in the brain, and the reverse, is to select a sensation—sound, for instance—and submit it to examination.

Sound is a quality *sui generis*, and is also distinguished from the tangible, the visible, &c., in so far as it has a special organ allotted to it. This organ is known to be attached to a sense-centre; and there are strong reasons for concluding that this centre is moreover attached to a certain portion of the vesicular neurine of the hemispheres, the latter forming the intellectual centre of the sense of hearing. For, in consciousness, sound, though not possessed of that eminently separating attribute, extension, is, nevertheless, strongly discriminated from the objects of the other senses; and since it can be perceived contiguously in time with colours, odours, tastes, &c., this seems to us probative evidence that it has a separate intellectual centre pertaining to it, for how otherwise could it be simultaneously distinguished from other sensations? How could the whole of the intellectual region of the brain be engaged at one and the same time with the sensation of sound, and yet distinguish this from other sensations which are being synchronously experienced? We do not see how it can be true to state, as some do, that two thoughts cannot be before the mind at one time. We admit that two thoughts cannot be in one and the same seat at once; but it does not follow from this that two centres cannot be simultaneously engaged, each with its own thought, when a comparison is made, or but one act of attention demanded. A relative implies a correlative, a logical

* It does not follow from this that action does not persist in the same seat for a long time together, giving rise to identical thoughts, as illustrated in the text.

whole is that the parts of which cannot be absent, and although in these instances there cannot be two thoughts in one seat, or the same cluster of cells, yet it is absolutely necessary that they should be simultaneously present each in different seats.

The quality (emotional) of single sounds, as agreeable or disagreeable, and of sounds heard together (who will undertake to deny this?) as harmonious or discordant.—This quality being only a mode in which the auditory centres, sensitive and intellectual, are affected clearly does not seem to us to involve any separate seat in the brain.

The quality (intellectual) of sound, as the ring of metals, and the articulations of speech.—This also does not appear to demand a separate seat, being simply a variation in the sensation of sound.

The intensity or loudness of sound.—As this only implies the degree of force with which the centres are acted upon, no one will think that it demands distinct localisation.

Pitch or tune.—Now, although this mark of distinction between sounds does not involve any other cells than the auditory, yet it does seem to us to involve difference of locality among these. Take the common chord in music, say C E G C in the natural key. When these sounds are struck together they can be clearly distinguished from each other. This being the case, we fail to see how the whole auditory apparatus, physical, nervous, sensitive, and intellectual, can be occupied at the same moment with each of them. The distinguishing of objects from each other is made possible, we should say, in the first place, because the objects are different, and produce different impressions; but if the whole auditory apparatus is affected by every sound, it must be homogeneously excited throughout, and in that case, how could there be any discerning of sounds of different pitch, struck at the same moment? It may, then, it is presumed, be laid down as a law, that if certain objects are synchronously discriminated, there cannot be homogeneous action in the whole brain. We beg to submit then:—

1.—That when sensations are of different species, they exclude each other to such a degree as to demand separate centres, not only of sensation, but also of intellection; and the anatomical evidence of this is well-nigh conclusive throughout.

2.—That certain sensations *simultaneously* cognised, and being of the same species, when they differ so much as to be

numerically distinguishable from each other, also exclude one another so far as to involve a distinct seat in their special centre; thus, one colour excludes another in extension, and one sound another in pitch, whenever both of either are perceived at the same moment.

3.—But that certain qualities which an individual sensation, a colour or a sound, may possess, although distinguishable from each other when simultaneously cognised, do *not* involve a separate seat, for let a colour be perceived, it may be well or badly lit, bright or dead, pleasing or otherwise, all at the same time; and all these qualities can be accounted for by supposing that the seat occupied in perceiving the individual colour is capable of experiencing, at the same moment, affections of various kinds. One source of variety in this respect is the degree of intensity in a sensation; another is the emotional effect which frequently attends one. Sounds, for instance, are emotionally felt as harmonious or discordant, colours as beautiful or ugly, tastes as delicious or disgusting.

So far we have examined perceptive consciousness, and have come to the conclusion that, as each of its divisions involves a distinct organ of sensation, and a distinct sense-centre, so it does also a distinct intellectual centre. We next proceed to examine conceptive thought, and promise a very different result.

Conception presupposes perception, for it requires two or more similar percepts to form a concept.* Thus A' A'' A''' are, to perception only, three different objects; but because they resemble each other, they become united in thought as one whole, a quantitative one; and this further mental pro-

* "Notions formed from several objects are called conceptions, as being produced by the power which the mind possesses of taking several things together (*concipere*, i. e., *capere hoc cum illo*)."
Outline of the Laws of Thought, by the Archbishop of York, § 48.

By conception is meant the act of conceiving; by concept that which is conceived. This latter term is now commonly adopted in this sense. There is a similar distinction between the act of perceiving and the object perceived, and it would be well to use the word percept to signify the latter.

We cannot discover any cognitive act so simple as that answering to a term. Perception, the most elementary act of thought, is a judgment, and has no other explicit form of expression, as a whole, than the proposition. As a term, therefore, is only part of a proposition, so it only represents a portion of an act of thought. We gather from this that common terms are properly called concepts because they imply a conceptive judgment. In like manner the word percept must imply a perceptive judgment, which is presupposed by every judgment of the former character.

cess is called conception, to which we owe all common terms and general propositions. The latter are, in fact, but so many singular propositions expressed, because of their precise similarity, in one proposition. Thus, when we say that all men are fallible, we state, in a condensed form, that John, James, Thomas, and the rest of the individuals who comprise the human race, are fallible. Now, the inference to be drawn from this is, that we require no other seats for concepts than those required for percepts. When the various perceptive seats, whether in one centre or in more, are put into similar action they unite as one, and give origin to conceptive thought or to a numerical whole, the units of which only differ in number from each other, not in quality. Each unit is a qualitative, the sum of such units a quantitative whole. When we perceive a flock of sheep, we observe that the individuals composing it bear a strong resemblance to each other, they are, therefore, regarded as a concept. Now, suppose the sheep to be metamorphosed into objects very dissimilar to each other, they would then be no more regarded as a concept of the same quantity as previously, but they would still continue to be viewed as so many percepts. Now, it is the same perceptive centres precisely which would be engaged in both these instances, but in the former, because the sheep are recognized to be so like, they are considered as a concept; in the latter, because they have become so unlike, the concept disappears, but yet the same number of percepts remain as before. It is only reasonable to suppose that when like impressions are made on the organs of sense, like messages are sent on by these to the sense-centres, and also by the latter to the supreme centres; and that, therefore, conceptive thought is fully to be accounted for by a special mode of action in the various seats of Perception. Having thus disposed of Conception, we have next to turn our attention to Reasoning.

For greater lucidity of exposition, we shall examine Reasoning, in the first place, as it exists in the Category of Difference. Reasoning involves two propositions called premisses, and these must be of such a nature as to contain between them a third proposition, called the conclusion. Thus, if A, as a qualitative whole, contains B, and B contains C, then A contains C. Observe here, that we have two percepts, namely, A contains B, and B contains C. But these percepts, by implication, contain a third percept, a mediate one, namely, A

contains C. Now the recognition of this implied percept is reasoning, which is, in fact, no more than mediate cognition. As to the question of localization of function, what is the inference to be drawn from what has now been stated? That reasoning involves no other seats whatever than those involved in the percepts, which form its premisses. What renders the conclusion of an inference strictly valid or undeniable is the fact that if the premisses have been thought, the conclusion has *already* been thought in them; and from this we conclude that when the cerebral action necessitated by the data has taken place, that necessitated by the conclusion has already taken place in the former. It is only the special act of attention given to the implied proposition, and its expression in words, that can be said to follow. Of course, memory being necessary to all thought, when we express the conclusion of an inference, the thought, which is a threefold relation, continues present to the mind, for it is characteristic of a relative that it cannot be entertained without the idea of its correlative being present at the same time. If the conclusion of an inference involved some other cerebral activity than that which is presupposed by the premisses, we should require some such organ as the Causality of the phrenologists; but seeing it does not, we are bound to remain content with Perceptive centres alone, *entia non sunt multiplicanda præter necessitatem.*

As, in the one Category, reasoning depends on the principle of differentiation in a unity of time, which leads to the formation of a whole of Comprehension, so, in the other Category, it depends on the law of similarity, which leads to the formation of a Whole of Extension. An instance of reasoning, however, in this Category is not in the Whole of Extension, if the premisses are supposed to be singular, for, in order to constitute such a Whole, there must be two similars, at least, denoted by the terms of a proposition. A proposition which declares that this A is like that B, is not in the Whole of Extension, but it expresses that kind of judgment by which such a Whole is generated, for if we judge that A is like B, then A and B form a concept, and can be given the single name, A.

As far as we have gone, it has been clearly seen that the order of knowledge is from the simple to the complex, the individual to the general, the concrete to the abstract, and not the reverse. Knowledge is built up, like everything else in nature, by gradual development out of simpler into more special combinations. Reasoning, for instance, is primarily in

the Whole of Comprehension, that is, to be quite explicit, must be in this Whole as the condition of its being in the counter Whole. In logical order, the Whole of Comprehension is presupposed by the Whole of Extension, but not the converse; nevertheless, chronologically, the two wholes perhaps are never uncombined. Reasoning, then, if regarded as exclusively in the Whole of Comprehension, is quite independent of common terms or general propositions. It is the function of conceptive thought to make general propositions out of a multiplicity of singular ones, and thus to give us arguments having general premisses. All reasoning, therefore, apart from Conception, must have singular premisses and a singular conclusion. What do we gather from this? That the famous *dictum de omni et nullo* is not the foundation of all argument. Since ratiocination is a descent from generals to particulars, it cannot be the first and only step in reasoning, as the Aristotelian school maintains. We have at root of all inference nothing but isolated singulars, standing like so many piers of a bridge aloof from each other, and waiting for the superstructure which is to unite them.

Let the following be reckoned as two singular arguments, the first in the Category of Difference, the second, in the Category of Resemblance:—A is linked by contiguity to B, B to C, therefore A to C; and A is linked by likeness to B, B to C, therefore A to C. Now, all that is requisite to bring these arguments into the Whole of Extension is to make the singular premisses general ones; by so doing, we unite under one concept so many similar percepts, a process which involves no separate seat in the brain.

There are, then, in the Whole of Extension, two kinds of inference, of which the above are examples, the one based on the principle of difference; the other on that of similarity. We have, in resemblance, a means of assimilating objects to each other, and forming a numerical whole; and the rules of deductive reasoning are designed chiefly to ensure that the quantity of the terms compared be equal, or that the quantity of the first term contain that of the second, and that the quantity of the second term contain that of the third. Thus, if the amount of resemblance expressed by the term man be covered by that expressed by the term animal, and the amount of resemblance expressed by the term animal be covered by that expressed by the term organic, then the quantity of the term man is covered by that of the term organic.

Now, the result of this analysis, as it appears to us, is, that nothing takes place in the most complex kind of reasoning which is not fully to be accounted for by the action of the Perceptive centres only. If the singular syllogism is clearly seen to be a case of mediate perception, all we have to do, in order to comprehend a general syllogism, is to consider it as so many similar mediate percepts stated in one formula.

Sir W. Hamilton has done much to dispel that blind submission to authority, by means of which deductive logic, more especially, was kept a closed subject, and he has introduced a postulate, compliance with which is the very foundation of logical science. This postulate is: "That we be allowed to state in language what is contained in thought." It seems to us, however, that much as Hamilton has done to apply this postulate, he has not succeeded in doing so to the full extent. For instance, the conclusion of a syllogism, such as:—

Whatever Being is sensori-motor is excito-motor,

Whatever Being is ideo-motor is sensori-motor, therefore

Whatever Being is ideo-motor is excito-motor—

is elliptical. The unabridged statement of the conclusion is the following: Therefore, whatever Being is ideo-motor is (through the medium of being sensori-motor) excito-motor. All reasoning, as we have before declared, is mediate cognition; and the conclusion of an inference, if *fully* expressed, should clearly convey this idea. We invite special attention to this fact, because it serves to elucidate what we have to propound below.

We have long come to the conclusion that the most important kind of inference conducted (we shall now make bold to say) by the Perceptive centres, is not the syllogism, but that which we have described elsewhere, and expressed in the following formula:—If it is perceived that *this*, when connected with *that*, exists; and if it is further perceived that *this*, when *not* connected with *that*, does not exist, then it is inferred (*i. e.*, meditately perceived) that *this* is necessarily dependent on *that* for existence; in unelliptical phraseology, that this is so connected with that as not to be able to exist apart from it. In the premisses of this inference we have two percepts, the one positive, the other negative. As to the first of these, any number of them would not yield the conclusion, for they would only amount to the *inductio per enumerationem simplicem* so much condemned by Bacon or the *post hoc propter hoc* of the illogical. In order, therefore, to render the positive

premiss of Induction of any avail, it must be complemented by the negative premiss, and to ensure this, the following Rule must be observed: *The medium through which the positive and the negative premiss of an inductive argument are compared must be strictly one or equivalent to it.* This Rule would have effectually deterred Macaulay's facetious judge from making a show of proving, according to Bacon's Rules, that the cause of the prevalence of Jacobinism was the practice of bearing three names. An inductive inference in order to stand the test of valid inference as already laid down must comply with this Rule. For to state, with truth, that this is dependent for existence on that, we must be able to state the data in which this proposition is implicitly contained, namely, those which enable us to declare that this is in suchwise connected with that, as not to be capable of existing without it. It is impossible, by one line of observation, that answering to the positive premiss of inductive reasoning, to be cognizant of what is commonly called necessary connexion. What Hume has written on this subject clearly establishes, so far as immediate perception is concerned, that "in all single instances of the operation of bodies or minds, there is nothing that produces any impression, nor consequently can suggest any idea of power or necessary connexion."* To know, for example, that a statue depends for the position which it maintains on the pedestal beneath, it is not sufficient to observe that the statue is above the pedestal, and in contact with it. For supposing that we had not, by prior inductive experience, ascertained that the statue necessarily rested on the pedestal, this line of observation would never teach us that it did. But let the pedestal be removed, and lo! the statue falls. We have now in our minds the mediate perception—the origin, as it seems to us, of the idea of necessary connexion—that the statue rests in suchwise on the pedestal, as to be incapable, without it, of maintaining its position.

It is by inductive reasoning that the Perceptive centres infer causation, and necessary co-existence. To omit mentioning this would give the transcendentalists room to say that these leading ideas were not mediate perceptions, but rational intuitions. Of the truth of this theory, however, we can discover no evidence whatever. It seems very clear to our minds, that causation or necessary antecedence and consequence are known by inductive reasoning, thus:—A follows

* Essays—Of the Idea of Necessary Connexion.

B, but when there is no B, no A follows; A, therefore, so follows B as not to be able to do so without the antecedence of B, in one word, A is caused by B. B may stand for any set of circumstances which are followed by an effect, for instance, the mixture of an alkali and acid in water. Necessary co-existence is also known by inductive reasoning, for example:—This circle has a centre, eliminate the centre, and the circle ceases to exist; therefore, the co-existence between this circle and its centre is of such a character as not to admit of the elimination of the centre; in short, the co-existence is a necessary, not a contingent one. Even contingent conjunction is not directly but indirectly perceived, for it can be known exclusively by the failure to establish necessary conjunction. Thus, day precedes night, but eliminate the antecedence of day, and night still exists; therefore, it becomes mediately known that the antecedence of day is only contingently connected with the sequence of night.

A full and varied exposition of inductive inference, in accordance with the theory here propounded, which differs in several points of moment from that upheld by Mr. J. S. Mill, would occupy many pages; and as we have already afforded this elsewhere,* we must now content ourselves with merely replying to the question: how it is that necessary conjunction is regarded as equivalent to universal conjunction, for to conclude without solving this difficulty would still leave the transcendentalists in possession of a portion of their defences. “Necessity and universality,” says Hamilton, “may be regarded as co-incident. For when a belief is necessary, it is *eo ipso* universal; and that a belief is universal is a certain index that it must be necessary (See Leibnitz *Nouveaux Essais*).”† In order to answer the question put above, let us examine the proposition:—This circle (as mediately perceived) must have a circumference. “This circle,” you exclaim; “but how about all circles? You cannot, from this single instance, conclude that all circles must have a circumference, at all events, not by postulating Perceptive centres as all that is needful to thought.” Well, let us see. I endeavour to suppose that a circle may have no circumference, but I fail to do so. Why do I fail? Because, psychologically

* The Alphabet of Thought, &c., 1861. The Law of Certainty. Medical Critic and Psychological Journal, 1863. Mr. J. S. Mill and the Inductive Origin of First Principles. Journal of Sacred Literature, 1866.

† Hamilton's Reid, p. 754.

speaking, I have in my mind the mediate perception, that a circle *must* have a circumference; and this completely excludes the supposition I attempt to make; physiologically speaking, because, when I think of a circle, certain kinds of cerebral action are involved, and if I try to suppose, while thinking of a circle, that a circumference is not necessary to its existence, I am endeavouring to disunite actions, which, on trial, always prove to be inseparable. For if we cannot by any possible means think of a geometrical figure which does not enclose a space, of two straight lines that do, or of an island which is not surrounded by water, it must be because the cerebral actions necessary for this are not possible; and, indeed, when the matter is clearly stated, we cannot fail to see why this should be the case. We cannot have certain brain-cells universally, and yet not universally, in operation at one and the same moment; nevertheless, this is the absurdity involved in attempting to suppose that a figure may not enclose a space. For in order to think of a figure, certain brain-cells must be universally engaged, but if we try to suppose that a figure does not enclose a space, we can only succeed on condition that some of these cells cease to act; should they do this, however, the notion of a figure must completely vanish. By endeavouring, then, to attach such a predicate as "does not enclose a space" to the subject "figure," we posit in the subject what we attempt to annihilate in the predicate; the two, therefore, cannot possibly co-exist. We cannot have our cake and eat it. It is no wonder, then, that we never can succeed in supposing the contradictory of necessary truths or conjunctions. Now the universal is an emphatic expression of the fact, that thus it is, and we cannot reverse it, yea, cannot even suppose, much less conceive, the reversal.

We have seen, then, that a necessary conjunction is mediately, that is, inductively known.

In order to be known, a necessary conjunction involves certain cerebral actions.

Nothing short of these actions will enable a necessary conjunction to be realised.

Therefore, to think anything concerning the idea of necessary conjunction which, either directly or by implication, necessitates anything short of these actions, is wholly incompatible with the continuance of the idea in the mind.

Wherefore it is inferred that it never can be possible to retain the idea of necessary conjunction, and, at the same

time realise a thought which involves the withdrawal from it of any of its distinguishing features.

Furthermore, when it is possible to retain the idea of a conjunction, notwithstanding the withdrawal from it of any quality not a distinguishing one, the conjunction is a contingent one.

Consequently the conclusion is, that in order to preserve the features which distinguish them from each other, a necessary conjunction must always be necessary, and a contingent conjunction always contingent.*

There is, however, no necessity in the *existence* of a case of necessary conjunction. Thus, an island may not exist, but if it does it must be surrounded by water, in order to continue distinguishable from other things.

Now, seeing that universal truths are arrived at in this negative fashion, we fully believe—and that without in the least discounting their claims to take higher rank than contingent conjunctions, as the manner of some is—that the Perceptive centres are completely adequate to their production.

For the proper understanding of the doctrine propounded above, it must be added, that the data of an inductive argument cannot themselves be established by any stronger evidence than immediate perception. We have no stronger evidence that the sun has appeared every day above our firmament for centuries, than the universal experience of man to that effect. For the truth of that which precedes inductive inference, therefore, we have no better authority than the direct perceptions of the human race. Now, as no column can in any part be firmer than its foundation, we cannot, as far as relates to matter-of-fact, regard the conclusion of an inductive inference as surpassing in authority the testimony on which its data rest, for *mediate* perception supposes *immediate*. When it is said, therefore, that, according to inductive perception, water, if it continues to exist, must always be what is signified by the chemical notation H O, it must be tacitly assumed that the chemists are correct as to the immediate percepts which implicitly contain the mediate one. That water will continue to exist, however, we can only believe because of the uniformity of its past existence, and because of its being essential to so

* We do not at all insist upon calling the former of these connexions necessary, but we do strongly upon the necessity of clearly marking the distinction between the two by some definite terminology.

many things. For if we firmly believe that the superstructure will keep in existence, we shall feel more confident still that the base will do so. Recognising such distinctions, logicians make a difference between the truth and the validity of a conclusion, for a conclusion may be valid without being true. In the formula of inductive reasoning given above, we have implied this by stating it hypothetically. If it is perceived that A is connected with B, and without B cannot exist, then it is meditately perceived that A is necessary to B. This conclusion, whether true or not as to fact, for that depends on the truth of the premisses, is, nevertheless, completely valid. It is to be noticed, therefore, that whenever a necessary and universal proposition is established by inductive inference, it is unconditionally true as to the idea entertained of an object, but as to the object itself must always imply the postulate—that the data afforded by immediate perception are fully to be relied on. Then, as to the existence in reality of an object, this is quite another thing than the conditions of its existence. We *believe* that the sun will rise to-morrow, because it always has done so; but we *know* that, if it does, it must be a luminous body, *i.e.*, we positively know this of the sun that exists in our minds, and postulate it to be true of the sun as existing in nature.

Since language has so much to do with thought, this paper would not be complete without some remarks on this head. We are disposed to think that next to the unity of mind known as personal identity, language is the great bond which knits together the various centres of perception. These do not operate independently of each other, for this would be productive of deplorable confusion and incoherence, but each seems to act mainly through the agency of the centre occupied with speech, and this imposes upon the rest the necessity of waiting their turn to be served. A chronological sequence at least among our expressed thoughts is thus secured.

To the logical psychologist, whose province it is to describe with minute accuracy the various operations of thinking as expressed, language occupies a high place indeed. Language bears about the same relation to thinking as agricultural implements do to husbandry, which of themselves do not till the ground, yet are indispensable to tillage. It is, however, in union with concepitive thought that language performs its high office, for it brings under one denomination each of the various stages of resemblance in which objects best admit of

being regarded. Were there no conception, everything would be known as an isolated object or individual, all names would be proper names, all propositions singular ones; and much advance in knowledge, therefore, would be quite impracticable.

It is also by means of such formulæ as the proposition and the argument, care being taken fully to state in words what is contained in thought, that we are enabled to understand, much more clearly than otherwise would be possible, what the intimate nature of thinking is; and without the power of originating these formulæ, it seems to be evident that the human mind would have advanced little, if at all, beyond the more intelligent members of the brute creation.

But what is language apart from that of which it is made the sign? Is there, as the phrenologists hold, any special organ for it? We fail to see that there is. Language consists of signs addressed to the ear, in ordinary discourse; to the eye, in writing and printing; to touch and muscular sensibility, in the case of the blind deaf-mute, supposing, that is, he has sufficient capacity for the acquisition of a language by this instrumentality. Language, then, consists exclusively of signs of some kind or other, with which certain ideas have, by convention, become associated. These signs are commonly articulate sounds, which, furthermore, are represented by marks addressed to the eye; for written words do not seem to be immediate signs of thoughts, but of the articulate sounds which are expressive of them.

Now, it is desirable to notice that although ordinary language is addressed to Hearing and Sight, these, considered simply as receptive centres, do not exercise a productive power in speech, for this, as far as our own consciousness informs us, is a power of a motory character, and this not only in audible, but in silent or mental speaking. So far back as the year 1861, we had remarked on this point, "that it is much easier to call up vivid thoughts of some objects than of others. Visible objects, it has been said" (this was by Mr. Bain in the first edition of '*The Senses and The Intellect*') "possess this aptitude in a high degree. But to us, by far the easiest objects to realise in thought are spoken words. Corresponding to the actual utterance of words, there is simply an ideal utterance of them." How is this ideal utterance of them effected? We have lately had the advantage of perusing what Dr. Maudsley has written on this head,* and

* *The Lancet*, November 28—December 5.

also Dr. Bastian's criticism on the same.* With the aid of these contributions, together with what we had previously thought on the subject, we have arrived at the following conclusion. It will be conceded that each intellectual centre has afferent nerves proceeding to it from its sense-centre, and efferent nerves proceeding from it to its appropriate cells in the motory nuclei. This being the case, there must be a capacity for two kinds of agency in each of the supreme centres,—the one receptive, the other regulative and actuating, the latter supposing the former, but not the converse. Thus, if I listen to some one talking, the auditory seat is clearly detected to be in the receptive state simply. If, however, I endeavour mentally or silently to reproduce the words I have heard, some motory function or other is clearly being exercised, but whether in any of the motory ganglia situated at the base of the brain, is not at all evident. For, since these are not voluntary and intellectual centres, how can they be possessed of initiative and regulative powers proportioning the force to be expended to some premeditated end? We rather incline to the opinion that, with the exception of their sensori-motor action, they only operate as they are bid by the supreme centres, but that, after some practice, they can, having received the command from above, operate automatically. We incline still more strongly to the opinion that they are quite as incapable of acting without the concomitance of muscular contraction as the piston of a steam engine is of moving without causing the fly-wheel to rotate. They seem to us to form part of the machinery of realised movement only.

Should this view be correct, we are reduced to the necessity of seeking the cause of silent speech in the actuating agency exclusively of one of the intellectual centres, this centre, since it is a voluntary one, having the power to perform such a function without summoning into activity the motory cells needed for actual movement. This opinion has the full sanction of our own consciousness, for to us, silent speech has always appeared to be exclusively confined to the intellectual region.

With Dr. Maudsley, then, we believe that the efferent system is indispensable to mental articulation; that is, however, as it seems to us, the efferent function of a supreme centre only; but, with Dr. Bastian, we think that the auditory centre is the one ordinarily engaged in performing this

* The British and Foreign Medico-Chirurgical Review, April 1869. p. 474.

office. It is however, the centre so occupied, because it is the best adapted for the purpose, and has, in consequence, become the practised servant of the thinking mind. Language, however, is not confined to the auditory seat, for in the case of congenital deafness we must, in conformity with the laws of physiology, conclude that this centre is in an undeveloped and inert condition, yet deaf-mutes are not debarred the use of language. With them, we imagine, the visual centre directly performs both the receptive and the actuating functions corresponding to those commonly performed by the auditory centre; while with us who enjoy the use of the latter, the former, as respects language, seems to act only in conjunction with the auditory centre. When *we* read or write, the actuating function of the higher acoustic seat appears to be actively engaged, for if we attempt either of these performances without mentally pronouncing the words, we come to a dead stand, and cannot go on at all until we resume the ordinary method of proceeding.

The theory propounded in this paper suggests many problems, and among these, the following :—Do the emotions involve any other centres than the Perceptive? This is a difficult question to decide, and cannot be disposed of in a paragraph, even if the true reply were known. Judging from what is ascertained as to the sense-centres, we may opine that it will be possible to discover that the Perceptive centres are also capable of being emotionally excited. Sweet sounds, luscious tastes, beautiful colours, exquisite odours, and their opposites, all indicate the emotional susceptibility of the sense-ganglia. Why may it not be the same with the intellectual centres? It is not unlikely that certain ideas are calculated to rouse pleasant or painful emotions in their own seats, just as the sensation of harmony rouses a pleasing feeling in the auditory sense-centre; while other ideas, namely, those pertaining to abstract science, leave these seats in a state of emotional indifference.

Does this theory afford an explanation of the diversity of talents and dispositions observed among men? Since there are several sense-ganglia and intellectual centres attached to them, it is evident that both kinds may vary in relative size and quality, and thus, in conjunction with great diversity in external circumstance, give rise to much variety of talent and character. Besides, when we consider that the higher intellectual operations are involutions embracing the simpler (the

same law ought to hold good in respect to the higher emotions),* there is much room for diversity in the degree in which the higher energies are displayed by different people. It seems to us that when the superior energies of thought and emotion abound, it betokens, seeing these are built upon the lower ones, that the mind-force must be more powerful than in cases where these energies are not strongly exhibited. For the mind-force must naturally be expended, in the first place, in the fundamental operations. The higher ones cannot be displayed with power therefore, unless there is a superabundance of this force. Moreover, according to the law of mental involution, we should conclude that deterioration of mind ought to manifest itself in the loftier earlier than in the lower attributes, because if there is a diminution of mind-force, it must be felt sooner in its remoter, than in its nearer fields of display. A skilled pathologist testifies to the *à posteriori* verification of this deduction. "The most delicately organised residua, representing the highest efforts of organic assimilation, are the first to attest by their sufferings any interference with the integrity of nervous element. Long before there is any palpable loss of memory in insanity, even before an individual is recognized to be becoming insane, there is a derangement of his highest reasoning, and of his moral qualities; his character is more or less altered, and, as it is said, "he is not himself."†

* Among the sense-centres the same law is clearly observable in so far as Sight Hearing, Taste, and Smell presuppose Touch and Actuation, which are the origin *quoad nos* of the extended and solid, that to which we impute colour, sound, savour, odour, &c.

† *Physiology and Pathology of the Mind.* By Dr. Maudsley, p. 191.

OCCASIONAL NOTES OF THE QUARTER.

*International Lunacy Statistics.**

The efforts of the Medico-Psychological Association to enforce in England and Scotland a uniform system of Asylum Statistics have at length achieved complete success, and are already used in all the English county asylums with the exception of those for Middlesex. In a review on the state of lunacy in 1867, in the January number of this Journal, we observed :—

The efforts of the Medico-Psychological Association to enforce the use of an uniform system of medical statistics in the public asylums receive again the most favourable mention in this last Report of the Commissioners in Lunacy. The second series of these tables are referred to, and in Appendix K. to this Report the whole ten tables recommended by the Medico-Psychological Association are printed. The Commissioners add that a ‘compilation of facts on insanity, registered according to this series of tables, in all institutions for the treatment of insanity in this country, would be of the greatest utility in statistical comparison, and supply the chief requisites for a scientific application of the results of medical statistics. They trust, therefore, that the Visitors and Superintendents of all such establishments may, as early as practicable, introduce therein this system of medical registration.’ The Medico-Psychological Association are deeply indebted to the Commissioners in Lunacy for this important recommendation, which will probably insure the general and early use of their statistical tables in the English public asylums.

A more elaborate effort in the same direction has been made by a committee appointed at the *Congrès Aliéniste International* of 1867. They have just published an admirable series of thirty-one tables, with an explanatory introduction by M. Lunier, ‘Inspecteur-Général du Service des Aliénés et du Service Sanitaire des Prisons de France.’

M. Lunier acknowledges, in handsome terms, the obligations the International Congress are under to the previous

* Projet de Statistique, applicable à l'Etude des Maladies Mentales arrêté par le Congrès Aliéniste International de 1867. Rapport and Exposé des Motifs. Par M. le Dr. L. Lunier, Inspecteur-Général du Service des Aliénés et du Service Sanitaire des Prisons de France. Paris : Imprimerie de E. Donnau, 9, Rue Cassette. 1869.

labours of the Medico-Psychological Association in this direction:—

La Commission, d'ailleurs, avait pris comme point de départ les tableaux statistiques que MM. Constans, Rousselin et moi avons préparés pour la France, sur la demande du ministre de l'intérieur; mais elle a fait aussi d'utiles et nombreux emprunts aux documents qui venaient d'être publiés par les soins de l'association des médecins d'asile en Angleterre, à la statistique d'Illenau faite sous la direction de l'un de ses membres, le savant et vénérable docteur Roller, et enfin au dernier rapport médical que j'ai publié en 1863 sur l'asile de Blois.

The French series of tables are much more elaborate than those published by the Medico-Psychological Association, and so far less adapted for general use. We annex the contents of each of the series of tables for the purpose of comparison. Although in a simpler form, the tables of this Association afford, it will be seen, nearly all the information given by the more elaborate forms of the *Congrès Aliéniste International*.

I. THE TABLES OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

I. Showing the Admissions, Re-admissions, Discharges, and Deaths during the Year.

II. Showing the Admissions, Re-Admissions, and Discharges from the Opening of the Asylum to the present date.

III. Showing the Admissions, Discharges, and Deaths, with the Mean Annual Mortality and proportion of Recoveries per cent. of the Admissions for each Year since the Opening of the Asylum.

IV. Showing the History of the Annual Admissions since the Opening of the Asylum, with the Discharges and Deaths, and the Numbers of each year remaining.

V. Showing the Causes of Death during the Year.

VI. Showing the length of Residence of those Discharged Recovered, and in those who have Died during the Year.

VII. Showing the Duration of the Disorder on Admissions, Discharges, and Deaths during the year.

VIII. Showing the Ages of the Admissions, Discharges, and Deaths during the year.

IX. Condition as to Marriage in the Admissions, Discharges, and Deaths during the year.

X. Showing the probable Causes, Apparent or Assigned, of the Disorder in the Admissions, Discharges, and Deaths during the year.

II. THE TABLES OF THE CONGRÈS ALIÉNISTE INTERNATIONAL.

A. STATISTIQUE MÉDICALE.

1	Mouvement général de la population	Aliénés admis pour la 1 ^{re} fois dans un asile.
2	Dureée de la maladie avant l'admission	
3	Mois de admission	
4	Etat civil	
5	Degré d'instruction	
6	Age au moment de l'admission	
7	Age au moment de l'explosion de l' maladie	
8	Circonstances aggravantes et complications	
9	Causes présumées de l'aliénation	
10	Professions	Aliénés admis dans l'année
11	Culte	
12	Lieu d'origine—Densité de la population	
13	Lieu d'origine—Configuration du sol	Aliénés guéris pendant l'année.
14	Curables et incurables	
15	Après rechute	
16	Age au moment de la guérison	Aliénés décédés dans l'année.
17	Durée du séjour dans l'asile ou du traitement	
18	Durée de la maladie avant l'admission	
19	Mois des sorties pour guérison	Aliénés restants le 31 décembre.
20	Causes présumées de l'aliénation	
21	Age dans le mois du décès	
22	Durée du séjour dans l'asile	Aliénés restants le 31 décembre.
23	Mois du décès	
24	Maladies qui ont déterminé la mort	
25	Maladies incidentes et infirmités observées pendant l'année	Aliénés restants le 31 décembre.
26	Causes présumées de l'alienation	
27	Age au 31 décembre	
28	Curables et incurables	
29	Aliénés occupés; nature des occupations	

B. STATISTIQUE ADMINISTRATIVE.

30	Mouvement général de la population.—Assistance à domicile.
31	Départements d'origine ou de naissance des restants le 31 décembre.

English Patients in Foreign Asylums.

In the *Journal of Mental Science*, for April, 1863, we published an "Occasional Note," *English Patients in Foreign Asylums*. We there stated, that a communication had been recently made to us by a well-informed foreign physician,

which induced us to bring before the Medico-Psychological Association the important question of the existence and condition of English patients resident in the foreign asylums of France, Belgium, and Germany, and we argued that it was hard to fancy anything more forlorn than the life of an English patient in a foreign asylum, amid a strange people with an unknown language, with food distasteful from previous habits, and an absence of all the comforts of home, and so passing year by year without one familiar tone falling on his ear, or one thought of home to gladden the desolate hours as they pass.

It requires, indeed, some reflection to realise the daily burthen which this forced residence in a foreign asylum must be to any of that large class—the partially insane—who are able both to realise their desolate position, and to feel acutely the want of those social ties and sympathies which bind together men of one family, creed, and nation ; sympathies which, in the modern treatment of insanity, it is our object to strengthen or call into being, not thus to extinguish.

Our suggested remedy for these evils was, that visitation of the English patients in foreign asylums might, by negotiation through the Foreign Office, be sanctioned, which would thus place in the hands of the Commissioners information which would enable them, by private representations to the relatives, to lessen materially the existing evils of this system of foreign lunacy treatment of English subjects.

In *The Cornhill* for June will be found a curious paper on the French *Maisons de Santé* (to one of which in Paris the writer obtained access through a pious fraud), in which the writer relates, as in illustration of these views, the case of a Scotchman he found thus detained. He writes :—

At this moment, and just as we were about to pass through the gate, a small man, with a pale face and a bushy red beard, rushed up to us, gesticulating. At the first words he uttered, as much as by his unmistakably British countenance, I recognised him for a countryman of mine.

“ Docteur ! docteur ! ” cried he in broken French, and striving to make himself understood in an incomprehensible mixture of English and other languages—“ Docteur ! let me out—you promised—you you—”

“ Let me be your interpreter,” I said, remarking that the doctor seemed to make no meaning out of what he said.

“ Oh ! ” exclaimed he, whilst his face became scarlet with pleasure

"are you an Englishman?" and he seized me eagerly by the hand. The director beckoned to me to come along, but my curiosity was excited, and I took no heed.

"Listen!" cried the patient. "This is my case. You can, perhaps, be of use to me. For Heaven's sake, therefore, and out of Christian charity, do not forget what I tell you. My name is Frederick G——. I am a Scotchman, and live near Glasgow. Last January I left England to take a few days' pleasure trip to Paris. Having scarcely ever travelled before, the fatigues of the journey from Scotland, together with my imprudence in plunging at once into sight-seeing without taking any rest, combined to make me ill. I was seized with a brain fever, and the proprietors of the Hôtel de H——, where I was staying, instead of sending for a doctor and tending me as they ought to have done, fetched the police, who, on the certificate of two Government physicians, shut me up here as a madman. During ten days I was kept in the *fourth division* of this house—that of the dangerous lunatics, confined by day in a strait-waistcoat, and tied by night on to a hard iron bed, in a stone cell, without a fire. How it was that I did not lose my senses altogether under such treatment I am sure I do not know. But, happily and providentially, I was cured. At the end of a fortnight I shook off my fever and was then transferred to this *second ward*, where, notwithstanding that since February I have been perfectly fit to be released, I have been detained unjustly for nine months. I have no means of corresponding with my family, for the director suppresses all my letters; and my mother and my sister (the only relations I have), judging from my silence and from Dr. E——'s reports, think, no doubt, that I am really mad. To make matters worse, neither the doctor, nor his assistant, nor the keepers understand a word of English; and I am, therefore totally unable to prove to them my soundness of mind——"

The unhappy man paused and seemed ready to cry.

"This gentleman appears to me of perfectly sound mind, Dr. E——," I exclaimed. "Yes," answered the director, speaking with evident vexation; "but he has been very ill, and has only lately recovered. He will be released in a few days." I translated this assurance to my fellow-countryman, and, at the same time, mentioned to him my address, promising that if he had not called upon me in a fortnight, I should conclude that he were still under confinement, and make his case known at the British embassy.

I am happy to add that within a week of our visit, the ill-fated Scotchman was liberated, and left France with the well-settled and prudent determination never to set foot in it again.

Farther, in the 'Occasional Note,' *English Patients in Foreign Asylums*, we observed "that the present French Government, in their wild, hopeless efforts to suppress freedom of thought in the most intellectual nation in Europe, occasionally send

noisy, political adversaries for temporary treatment in the Bicêtre, has been stated to us on undoubted authority." The writer in *The Cornhill* makes this similar remark:—

"One finds in history that it was in the time of Napoleon I. that maisons de santé first played an important part in the government as private State prisons. They replaced the Bastille and the "*lettres de cachet*," so much in honour in the last century, and were made by Fouché to serve the ends of more than one political villany. In 1802, the Prince de Polignac, afterwards so famous as Prime Minister of Charles X., was condemned for conspiracy to two years' imprisonment; but at the end of that time, instead of regaining his liberty, he was removed with his brother to a maison de santé, where they both remained incarcerated ten years, their captivity only ending, in fact, with the reign of the Emperor. Mdlle. de Narbonne Fritzlar, too, the lovely Duchess of Chevreuse, some time maid of honour to the Empress Josephine, was, in 1808, cloistered in a maison de santé, on account of the political aversion she had evinced for Bonaparte; and, again, it was from a private lunatic asylum, in which he had been many years arbitrarily confined, that General Mallet escaped on the night of October 23, 1812, whilst the Grand Army was in Russia, and attempted that *coup d'état* which, ill-organised as it was, very nearly succeeded in overthrowing the Government. Under the Bourbons, up to 1830, it was the turn of the Bonapartists to fill the maisons de santé; under Louis Philippe the Republicans and the Legitimists were more or less shut up in them; and since the establishment of the Second Empire, it has been towards the persecution of political writers in country newspapers, or of too free-thinking students, that maisons de santé have been directed."

The Report of the New South Wales Lunacy Commissioner.

The New South Wales Government appointed Dr. Norton Manning, in 1867, as a Commissioner to visit the chief asylums in the United Kingdom and on the Continent, and in the United States.

The result of his labours are embodied in a Report* published by authority of the New South Wales Government, and which contains a mass of information on the construction and government of asylums such as hitherto did not exist in the English language.

Dr. Norton Manning's Report must prove of incalculable value to every asylum superintendent. The extent of his labours

* 1868. New South Wales. Report of Lunatic Asylums, by Frederick Norton Manning, M.D. By Authority. Sidney : Thomas Richards, Government Printer. 1868. P.p. 288, with many lithograph plans.

will be best indicated by a summary of the work accomplished, which he gives in the introduction to his Report. It would be difficult to praise too highly the ability and diligence displayed by Dr. Norton Manning in the performance of the mission entrusted to him.

With regard to the use of restraint, Dr. Norton Manning reports that in America restraint is even more largely used than on the Continent. At the Criminal Asylum, Auburn, U.S., there is (he writes) a liberal use of handcuffs, besides other means; and in the City Asylum of Philadelphia men are also to be seen with heavy wristlets fastened to a chain passed round the waist; but these (he adds) are exceptional cases. In the State asylums and lunatic hospitals, the camisole, muff, wrist-band and bed-straps form the chief means of restraint; but in some cases chair-straps and crib-beds are used.

Dr. A. O. Kellogg on the Non-Restraint System.

In the April number of the *Journal of Mental Science* we noticed in one of these "*Occasional Notes of the Quarter*" a paper in the American *Journal of Insanity*, for January, 1869, containing Notes of a visit by Dr. Kellogg, to some of the principal Hospitals for the Insane in Great Britain, France, and Germany, with observations on the use of Mechanical Restraint in the treatment of the insane. We referred to his description* of the "refractory bath," which he found in use

* "As the 'refractory bath' is, we believe, unknown in this country, we will try in this place to give some idea of what it is. It consists of an ordinary bath tub, covered with a board in which there is a round opening, just large enough to grasp the neck of the patient securely, leaving the head to be showered, perhaps, with cold water above, while the body is in the bath below; reminding one of the stocks anciently in use in England for offenders, with this important difference, that whereas only the feet of the criminal were 'in chancery' the head of the 'refractory' insane man was in this position, thus confining him as effectually as though it was in the ancient pillory. We saw in England the head of one unfortunate in this modern one, and were told he had been treated thus during several hours a day for a week at a time. We asked the young physician who conducted us, if this part of the non-restraint system was looked upon as medical and curative, or moral and disciplinary. 'Both,' was the prompt reply. 'Do you blister,' we continued, 'in certain cases?' 'Certainly,' said he. 'And do you regard the blister as a medical or moral means?' we continued. He smiled, and said that the blister was also regarded as having a two-fold efficacy in certain cases. Now, we object to such means, as being neither medical nor moral; and question the consistency of those who seek to disparage a camisole or muff put on a violent patient, or one who persistently denudes himself, because public sentiment is opposed to it, while he takes his own patient to this 'refractory bath,' and puts his head through a hole in its cover just large enough to encircle his neck, whether he calls the operation a medical or moral means—restraint or non-restraint."—Dr. A. O. Kellogg. *Notes of a Visit, &c., &c.* *American Journal of Insanity.* January, 1869.

he said in one of the English County Asylums ; a description which we said would be as novel to the readers of the *Journal of Mental Science* as to Dr. Kellogg's across the Atlantic, and we further ventured to remark " We are very unwilling to cast doubt upon the veracity of any gentleman. We may, however, state with some confidence that the Commissioners in Lunacy are ignorant of the whereabouts of this ' refractory bath,' and we think that Dr. Kellogg is bound to furnish them with the locality. We should also like to know the name of the ' young physician ' whom he thus, as we believe, libels in the above extract."

The English County Asylum, indicated by Dr. Kellogg, was evidently that for the county of Lancashire at Prestwich. The following note has, with reference to Dr. Kellogg's article, been circulated with the annual report of that asylum :—

Since writing the foregoing Report, my attention has been drawn by the Commissioners in Lunacy to some serious misstatements, published by Dr. Kellogg in the *American Journal of Insanity*, in reference to certain practices alleged by him to be in vogue in the Prestwich Asylum.

Dr. Kellogg states that " bleeding, bathing, and, in some cases, large doses of tartarised antimony are used freely with patients who are greatly disturbed ; and those who persist in soiling themselves are treated to the ' Refractory Bath,' and that, too, continued longer than is absolutely necessary for mere cleanliness."

All this I most emphatically deny.

I have been upwards of six and twenty years connected with lunatic asylums, and in that time have but *once* resorted to venesection ; the exceptional case being one of puerperal convulsions, which occurred subsequently to Dr. Kellogg's visit to this asylum.

Tartarised antimony I but seldom give, and then only in small doses.

The " Refractory Bath " which Dr. Kellogg so graphically describes in another part of his article, I have neither seen here nor elsewhere. Indeed, until my attention was drawn to that gentleman's observations, I had never even heard of such an ingenious device for correcting dirty habits.

(Signed) J. HOLLAND,
Medical Superintendent.

Prestwich Asylum, 25th March, 1869.

After this temperate but decided contradiction Dr. Kellogg will, perhaps, see the necessity of retracting and apologising for a statement which, in any case, seemed sensational, and now must be branded as false.

PART II.—REVIEWS.

The Limits of Philosophical Inquiry. Address delivered to the Members of the Edinburgh Philosophical Institution, November 6th, 1868. By WILLIAM, LORD ARCHBISHOP OF YORK. Edmonston and Douglas.

It is not a little hard upon those who now devote themselves to the patient interrogation of nature, by means of observation and experiment, that they should be counted, whether they will or not, ministers of the so-called Positive Philosophy, and disciples of him who is popularly considered the founder of that philosophy. It matters not that positive investigation within the limits which Comte prescribes was pursued earnestly and systematically before his advent, that many of those distinguished since his time for their scientific researches and generalisations have been unacquainted with his writings, that others who have studied them withhold their adherence from his doctrines, or energetically disclaim them. These things are not considered; so soon as a scientific inquirer pushes his researches into the phenomena of life and mind, he is held to be a Comtist. Thus it happens that there is a growing tendency in the public mind to identify modern science with the positive philosophy. Considering how much mischief has often been done by identifying the character of an epoch of thought with the doctrines of some eminent man who has lived and laboured and taken the lead in it, and thus making his defects and errors, hardened into formulas, chains to fetter the free course of thought, it is no wonder that scientific men should be anxious to disclaim Comte as their lawgiver, and to protest against such a king being set up to reign over them. Not conscious of any personal obligation to his writings, conscious how much, in some respects, he has misrepresented the spirit and pretensions of science, they repudiate the allegiance which his enthusiastic disciples would force upon them, and which popular opinion is fast coming to think a natural one. They do well in thus

making a timely assertion of independence; for if it be not done soon, it will soon be too late to be done well. When we look back at the history of systems of religion and philosophy, it is almost appalling to reflect how entirely one man has appropriated the intellectual development of his age, and how despotically he has constrained the faith of generations after him; the mind of mankind is absolutely oppressed by the weight of his authority, and his errors and limitations are deemed not less sacred than the true ideas of which he has been the organ; for a time he is made an idol, at the sound of whose name the human intellect is expected to fall down and worship, as the people, nations and languages were expected, at what time they heard the sound of the flute, harp, sackbut, dulcimer, and all kinds of music, to fall down and worship the golden image which Nebuchadnezzar the king had set up. Happily it is not so easy to take captive the understanding now, when thought is busy on so many subjects in such various domains of nature, and when an army of investigators marches where a solitary pioneer painfully sought his way, as it was formerly when the fields of intellectual activity were few and limited, and the labourers in them few also.

A lecture delivered by the Archbishop of York before the Edinburgh Philosophical Institution, which has been published as a pamphlet, contains a plain, earnest, and on the whole temperate but not very closely reasoned, criticism, from his point of view, of the tendency of modern scientific research, or rather of positivism, and a somewhat vague declaration of the limits of philosophical inquiry. He perceives with sorrow, but without great apprehension, that the prospects of philosophy are clouded over in England, France and Germany, and that a great part of the thinking world is occupied in physical researches. But he does not therefore despair; he believes that positivism indicates only a temporary mood, produced by prostration and lassitude after a period of unusual controversy, and that it will after a time pass away, and be followed by a new era of speculative activity. It may be presumed that men, weary of their fruitless efforts to scale the lofty and seemingly barren heights of true philosophy, have taken the easy path of positivism, which does not lead upwards at all, but leads, if it be followed far enough, to quagmires of unbelief. The facts and the steps of reasoning by which the Archbishop is able thus to couple a period of speculative activity with a period of reli-

gious belief, and to declare a system of positive scientific research to be linked inseparably with a system of disbelief, do not appear; they are sufficient to inspire strong conviction in him, but they apparently lie too far down in the depths of his moral consciousness to be capable of being unfolded, in lucid sequence, to the apprehension of others.

To the critical reader of the lecture it must at once occur that a want of discrimination between things that are widely different is the cause of no little looseness, if not recklessness, of assertion. In the first place, the Archbishop identifies off-hand the course and aim of modern scientific progress with the positivism of Comte and his followers. This is very much as if anyone should insist on attributing the same character and the same aim to persons who were travelling for a considerable distance along the same road. As it was Comte's great aim to organise an harmonious co-ordination and subordination of the sciences, he assimilated and used for his purpose all the scientific knowledge which was available to him, and systematized the observed method of scientific progress from the more simple and general to the more special and complex studies; but it assuredly is most unwarrantable to declare those who are engaged in physical research to be committed to his conclusions and pretensions, and there can be no question that a philosophy of science, when it is written, will differ widely from the so-called positive philosophy.

In the second place, the Archbishop unwittingly perpetrates a second and similarly reckless injustice in assuming, as he does, that modern science must needs accept what he describes as the sensational philosophy. "Thus the business of science," he says, "is to gather up the facts as they appear, without addition or perversion of the senses. As the senses are our only means of knowledge, and we can only know things as they present themselves to the eye and ear, it follows that our knowledge is not absolute knowledge of the things, but a knowledge of their relations to us, that is, of our sensations." Passing by the question, which might well be raised, whether any one, even the founder of the sensational philosophy, ever thus crudely asserted the senses to be our only means of knowledge, and our knowledge to be only a knowledge of our sensations; passing by, too, any discussion concerning what the Archbishop means, if he means anything, by an absolute knowledge of things as distinct from a knowledge of things in their relations to us, and all speculations

concerning the faculties which finite and relative beings have of apprehending and comprehending the absolute ; it is necessary to protest against the assumption that science is committed to such a representation of the sensational philosophy, or to the sensational philosophy at all. Those modern enquirers who have pushed farthest their physical researches into mental functions and bodily organs, have notoriously been at great pains to discriminate between the nervous centres which minister to sensation and those which minister to reflection, and have done much to elucidate the physical and functional connections between them. They have never been guilty of calling all knowledge a knowledge only of sensations, for they recognise how vague, barren, and unmeaning are the terms of the old language of philosophical strife, when an attempt is made to apply them with precision to the phenomena revealed by exact scientific observation. The sensorial centres with which the senses are in direct connection are quite distinct from, and subordinate to, the nervous centres of ideation or reflection—the supreme hemispherical ganglia. It is in these, which are far more developed in man than in any other animal, and more developed in the higher than in the lower races of men, that sensation is transformed into knowledge, and that reflective consciousness has its seat. The knowledge so acquired is not drained from the outer world through the senses, nor is it a physical mixture or a chemical compound of so much received from without and so much added by the mind or brain ; it is an organised result of a most complex and delicate process of development in the highest kind of organic element in nature—a mental organisation accomplished, like any other organisation, in accordance with definite laws. We have to do with laws of life, and the language used in the interpretation of phenomena must accord with ideas derived from the study of organisation ; for assuredly it cannot fail to produce confusion if it be the expression only of ideas derived from the laws of physical phenomena. Now the organisation of a definite sensation is a very different matter from, has no resemblance in nature to, the physical impression made upon the organ of sense, and the organisation of an idea is a higher and more complex vital process than the organisation of a sensation; to call knowledge, therefore, a knowledge only of sensation is either a meaningless proposition or, in so far as it has meaning, it is falser than it would be to affirm the properties of a chemical compound to be those of

its constituents. Were those who pursue the scientific study of mind not more thoughtful than the Archbishop of York gives them credit for being, they would have no reason to give why animals with as many senses as man has, and with some of them more acute than his, have not long since attained, like him, to an understanding of the benefits of establishing archbishoprics.

It must be understood that by the assertion of the organic basis of mental function is not meant that the mind imposes the laws of its own organisation ; on the contrary, it obeys them, knowing not whence they come nor whither they tend. Innate ideas, fundamental ideas, categories of the understanding, and like metaphysical expressions, are obscure indications of the laws of action of the internal organising power under the conditions of its existence and exercise ; and it is easy to perceive that a new and higher sense conferred on man, altering entirely these conditions, would at once render necessary a new order of fundamental ideas or categories of the understanding. That all our knowledge is relative cannot be denied, unless it be maintained that in that wonderful organising power which cometh from afar there lies hidden that which may be intuitively revealed to consciousness as absolute knowledge—that the nature of the mysterious power which inspires and impels evolution may, by a flash of intuitive consciousness, be made manifest to the mind in the process of its own development. If nature be attaining to a complete self-consciousness in man, it is conceivable that this might happen ; and if such a miraculous inspiration does thus reveal the unknown, it will be a revelation of the one primeval Power. Clearly, then, as positive scientific research is powerless before a vast mystery—the whence, what, and whither of the mighty power which gives the impulse to evolution, it is not justified in making any proposition regarding it. This, however, it may rightly do ; while keeping its inquiries within the limits of the knowable, it may examine critically, and use all available means of testing, the claims and credentials of any professed revelation of the mystery. And it is in the pursuit of such inquiries that it would have been satisfactory to have had from the Archbishop, as a high priest of the mystery, some gleam of information as to the proper limits which he believes ought to be observed. At what point is the hitherto and no farther to which inquiry may advance in that direction ? Where do we reach the holy ground when it becomes

necessary to put the scientific shoes from off our feet? There must assuredly be some right and duty of examination into the evidence of revelations claiming to be divine; for if it were not so, how could the intelligent Mussulman ever be, if he ever is, persuaded to abandon the one God of his faith, and to accept what must seem to him the polytheism of the Christian Trinity?

Another error, or rather set of errors, into which the Archbishop recklessly glides, is that he assumes positive science to be materialistic, and materialism to involve the negation of God, of immortality, and of free-will. This imputation of materialism, which ought never to have been so lightly made, it is quite certain that the majority of scientific men would earnestly disclaim; moreover, the materialist, as such, is not under any logical constraint whatever to deny either the existence of a God, or the immortality of the soul, or free-will. One is almost tempted to say that in two things the Archbishop distances competition; first, in the facility with which he loses or dispenses with the links of his own chain of reasoning, and, secondly, in his evident inability to perceive, when looking sincerely with all his might, real and essential distinctions which are at all subtle, which are not broadly, and almost coarsely, marked. If the edge of a distinction be fine, if it be not as blunt and thick as a weaver's beam, it fails seemingly to arrest his attention. Whosoever believes sincerely in the doctrine of the resurrection of the body, as taught by the apostle Paul, which all Christians profess to do, must surely have some difficulty in conceiving the immortality of the soul apart from that of the body; for if the apostle's preaching and the Christian's faith be not vain, and the body do rise again, then it may be presumed that the soul and it will share a common immortality, as they have shared a common mortality. So far, then, from materialism being the negation of immortality, the greatest of the apostles, the great apostle of the Gentiles, earnestly preached materialism as essential to the life which is to come. There is as little or less justification for saying that materialism involves of necessity the denial of free-will. The facts on which the doctrine of free-will is based are the same facts of observation, whether spiritualism or materialism be the accepted faith, and the question of their interpretation is not essentially connected with the one or the other faith; the spiritualist may consistently deny, and the materialist consistently advocate, free-will. In like manner, the belief in the exist-

ence of God is nowise inconsistent with the most extreme materialism, for it is quite independent of the facts and reasons on which this faith is founded. Multitudes may logically believe that mind is inseparable from body in life or death—that it is born with it, grows, ripens, decays, and dies with it, without disbelieving in a great and intelligent Power who has called man into being, and ordained the greater light to rule the day and the lesser light to rule the night.

What an unnecessary horror hangs over the word materialism! It has an ugly sound, and an indefinite meaning, and is well suited, therefore, to be set up as a sort of moral scarecrow; but if it be closely examined, it will be found to have the semblance of something terrible, and to be empty of any real harm. In the assertion that mind is altogether a function of matter, there is no more actual irreverence than in asserting that matter is the realisation of mind; the one and the other proposition being equally meaningless so far as they postulate a knowledge of anything more than phenomena. Whether extension be visible thought, or thought invisible extension, is a question of a choice of words, and not of a choice of conceptions. To those who cannot conceive that any organisation of matter, however complex, should be capable of such exalted functions as those which are called mental, is it really more conceivable that any organisation of matter can be the mechanical instrument of the complex manifestations of an immaterial mind? Is it not as easy for an omnipotent power to endow matter with mental functions as it is to create an immaterial entity capable of accomplishing them through matter? Is the Creator's arm shortened so that he cannot endow matter with sensation and ideation? It is strangely overlooked by many who write on this matter, that the brain is not a dead instrument, but a living organ, with functions of a higher kind than those of any other bodily organ, insomuch as its organic nature and structure far surpass those of any other organ. What then are those functions if they are not mental? No one thinks it necessary to assume an immaterial liver behind the hepatic structure, in order to account for its functions. But so far as the nature of nerve and the complex structure of the cerebral convolutions exceed in dignity the hepatic elements and structure, so far must the material functions of the brain exceed those of the liver. Men are not sufficiently careful to ponder the wonderful operations of which matter is capable, or to reflect on the miracles effected by it which are continually before

their eyes. Are the properties of a chemical compound less mysterious essentially because of the familiarity with which we handle them? Consider the seed dropped into the ground; it swells with germinating energy, bursts its integuments, sends upwards a delicate shoot, which grows into a stem putting forth in due season its leaves and flowers, until finally a beautiful structure is formed, such as Solomon in all his glory could not equal, and all the skill of mankind cannot imitate. And yet all these processes are operations of matter; for it is not thought necessary to suppose an immaterial or spiritual plant which effects its purposes through the agency of the material structure which we observe. Surely there are here exhibited properties of matter wonderful enough to satisfy any one of the powers that may be inherent in it. Are we then to believe that the highest and most complex development of organic structure is not capable of even more wonderful operations? Would you have the human body, which is a microcosm containing all the forms and powers of matter organised in the most delicate and complex manner, to possess lower powers than those forms of matter exhibit separately in nature. Trace the gradual development of the nervous system through the animal series, from its first germ to its most complex evolution, and let it be declared at what point it suddenly loses all its inherent properties as living structure and becomes the mere mechanical instrument of a spiritual entity. In what animal or in what class of animals does the immaterial principle abruptly intervene and supersede the agency of matter, becoming the entirely distinct cause of a similar, though more exalted, order of mental phenomena? To appeal to the consciousness of every man for the proof of a power within him totally distinct from any function of the body, is not admissible as an argument until it be proved that matter, even though in the form of the most complex organisation, is incapable of certain mental functions. Why may it not, indeed, be capable of consciousness, seeing that, whether it be or not, the mystery is equally incomprehensible to us, equally simple and easy to the power which created matter and its properties? When again we are told that every part of the body is in a constant state of change, that within a certain period every particle of it is renewed, and yet that amidst these changes a man feels that he remains essentially the same, we perceive nothing inconsistent with the idea of the action of a material organ; for it is not absurd to suppose that in the

brain the new series of particles take the pattern of those which they replace, as they do in other organs and tissues. Even the scar of a wound on the finger is not often effaced, but grows as the body grows : why, then, assume the necessity of an immaterial principle to prevent the impression of an idea from being lost ?

The truth is that men have disputed vaguely and violently about matter and motion, and about the impossibility of matter affecting an immaterial mind, never having been at the pains to reflect carefully upon the different kinds of matter and the corresponding differences of kind in its motions. All sorts of matter, diverse as they are, were vaguely *matter*—there was no discrimination made ; and all the manifold and special properties of matter were comprised under the general term *motion*. This was not, nor could it lead to, good ; for matter really rises in dignity from physical matter in which physical properties exist to chemical matter and chemical forces, and from chemical matter to living matter and its modes of force ; and then in the scale of life a continuing ascent leads upwards from the lowest kind of living matter with its force or energy, through different kinds of histological elements with their special energies or functions, to the highest kind of living matter with its force—viz., nerve matter and nerve force ; and, lastly, through the different kinds of nerve cells and their energies to the most exalted agents of mental function. Obviously then simple ideas derived from observation of mechanical phenomena cannot fitly be applied to the explanation of the functions of that most complex combination of elements and energies, physical and chemical, in a small space, which we have in living structure ; to speak of mechanical vibration in nerves and nerve centres is to convey false ideas of their extremely delicate and complex energies, and thus seriously to hinder the formation of more just conceptions.

In like manner, much barren discussion has been owing to the undiscriminating inclusion of all kinds of mental manifestations under the vague and general term *mind* ; for there are most important differences in the nature and dignity of so-called mental phenomena, when they are properly observed and analysed. Those who have not been at the pains to follow the order of development of mental phenomena and to make themselves acquainted with the different kinds of functions that concur to form what we call mental action, and who have not studied the differences of matter, are doing no

better than beating the air when they declaim against materialism. By rightly submitting the understanding to facts it is made evident that, on the one hand, matter rises in dignity and function until its energies merge insensibly into functions which are described as mental, and, on the other hand, that there are gradations of mental function, the lowest of which confessedly do not transcend the functions of matter. The burden of proving that the *Deus ex machina* of a spiritual entity intervenes somewhere, and where it intervenes, clearly lies upon those who make the assertion or who need the hypothesis. They are not justified in arbitrarily fabricating a hypothesis entirely inconsistent with experience of the orderly development of nature, which even postulates a domain of nature that human senses cannot take any cognisance of, and in then calling upon those who reject their assumption to disprove it; these have done enough if they shew that there are no grounds for and no need of the hypothesis.

Here we might properly take leave of the archbishop's address, were it not that the looseness of his statements and the way in which his understanding is governed by the old phrases of philosophical disputes tempt further criticism, and make it a duty to expose aspects of the subject of which he has evidently not the least notion. He would, we imagine, be hard put to it to support the heavy indictment contained in the following sentence which he flings off as he rushes heedlessly forward:—"A system which pretends to dispense with the ideas of God, of immortality, of free agency, of causation, and of design, would seem to offer few attractions." The question of the value of any system of philosophy is not, it may be observed incidentally, whether it is unattractive because it dispenses with received notions, still less because its adversaries imagine that it must dispense with them; but it is whether it possesses that degree of fundamental truth which will avail to enlarge the knowledge, and to attract ultimately the belief of mankind. History does not record that the doctrines of Christianity were found attractive by the philosophers of Greece or Rome when they were first preached there. It does, indeed, record that Paul preaching on Mars' Hill at Athens, the city of intellectual enlightenment, made no impression, but found it prudent to depart thence to Corinth, nowise renowned at that time as a virtuous city. We have not, however, quoted the foregoing sentence in order to repudiate attractiveness as a criterion of truth, but to take occasion to declare the wide difference between the modest spirit

of scientific inquiry and the confident dogmatism of the so-called positive philosophy. Science, recognising the measure of what it can impart to be bounded by the existing limits of scientific inquiry, makes no proposition whatever concerning that which lies beyond these limits; equally careful, on the one hand, to avoid a barren enunciation in words of what it cannot apprehend in thought, and, on the other hand, to refrain from a blind denial of possibilities transcending its means of research. A calm acquiescence in ignorance until light comes is its attitude. It must be borne clearly in mind, however, that this scrupulous care to abstain from presumptuous assertions does not warrant the imposition of any arbitrary barrier to the reach of its powers, but is quite consistent with the conviction of the possibility of an invasion and subjugation of the unknown to a practically unlimited extent.

The wonder is—and the more it is considered the greater it seems—that human intelligence should ever have grown to the height of either affirming or denying the existence of a God. Certainly the denial implies, even if the affirmation does not also, the assumption of the attributes of a God by him who makes it. Let imagination travel unrestrained through the immeasurable heavens, past the myriads of orbs which, revolving in their appointed paths, constitute our solar system, through distances which words cannot express nor mind conceive definitely, to other suns and other planetary systems; beyond these glimmer in the vast distance the lights of more solar systems, whose rays, extinguished in the void, never reach our planet; and yet they are not the end, for as they are left behind and vanish in remote space other suns appear, until, as the imagination strives to realise their immensity, the heavens seem almost an infinite void, so small a space do the scattered clusters of planets fill. Then let sober reflection take up the tale, and, remembering how small a part of the heavenly hosts our solar system is, and how small a part of our solar system the earth is, consider how entirely dependent man, and beast, and plant, and every living thing is upon the heat which this our planet receives from the sun; how vegetation now flourishes through its inspiring influence, and the vegetation of the past gives up again in long buried forests the heat which ages ago it received from the sun; how animal life is sustained by the life of the vegetable kingdom, and by the heat which is received directly from the sun; and how man, as the crown of living things, and his highest mental energy as the crown of his development, depend on all that has gone before

him in the evolution of nature ; considering all these things, does not living nature appear but a small and incidental by-play of the sun's energies ? Seems it not an unspeakable presumption to affirm that man is the main end and purpose of creation ? Is it not appalling to think that he should dare to speak of what so far surpasses the reach of his feeble senses, and of the power which ordains and governs the order of events—impiously to deny the existence of a god, or equally impiously to create one in his image ? The portion of the universe with which man is brought into relation by his existing sentiency is but a fragment, and to measure the possibilities of the infinite unknown by the standard of what he knows is very much as if the oyster should judge all nature by the experience gained within its shell—should deny the existence on earth of a human being, because its intelligence could not conceive his nature or recognise his works. Encompassing us and transcending our ken is a universe of energies ; how can man then, the “feeble atom of an hour,” presume to affirm whose glory the heavens declare, whose handiwork the firmament sheweth ? Certainly true science does not so dogmatise.

Lord Bacon, in a well known passage, remarked : “that a little philosophy inclineth man’s mind to Atheism, but depth in philosophy bringeth men’s minds about to religion ; for while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no further ; but when it beholdeth the chain of them, confederate and linked together, it must needs fly to Providence and Deity.” It is not easy to perceive, indeed, how modern science, which makes its inductions concerning natural forces from observation of their manifestations, and arrives at generalisations of different forces, can, after observation of nature, avoid the generalisation of a one intelligent mental force, linked in harmonious association and essential relations with other forces, but leading and constraining them to higher aims of evolution. To speak of such evolution as the course of nature is to endow an undefined agency with the properties which are commonly assigned to a god, whether it be called God or not. The nature, aim and power of this supreme intelligent force, working so far as we know from everlasting to everlasting, it is plainly impossible that man, a finite and transient part of nature, should comprehend. To suppose him capable of doing so would be to suppose him to have the very attributes of Deity.

Whether the low savage has or has not the idea of a god,

is a question which seems hardly to deserve the amount of attention which it has received. It is certain that he feels himself surrounded and overruled by forces the natures and laws of which he is quite ignorant of, and that he is apt to interpret them, more or less clearly, as the work of some being of like passions with himself, but vastly more powerful, whom it is his interest to propitiate. Indeed, it would appear, so far as the information of travellers enables us to judge, that the idea entertained of God by the savage who has any such idea is nearly allied to that which civilised people have of a devil; for it is the vague dread of a being whose delight is in bringing evil upon him rather than that of a being who watches over and protects him. Being ignorant altogether of the order of nature, and of the fixed laws under which calamities and blessings alike come he frames a dim, vague and terrible embodiment of the causes of those effects which touch him most painfully. Will it be believed, then, that the Archbishop of York actually appeals to the instinct of the savage to rebuke the alleged atheism of science? Let it be granted, however, that the alleged instinct of the savage points to a god and not to a devil ruling the world, it must in all fairness be confessed that it is a dim, undefined, fearful idea—if that can be called an idea which form has none—having no relationship to the conception of a God which is cherished among civilised people. In like manner, as the idea of a devil has undergone a remarkable development with the growth of intelligence, until in some quarters there is evinced a disposition to improve him out of being, so the conception of a god has undergone an important development through the ages, in correspondence with the development of the human mind. The conceptions of God affirmed by different revelations notably reflect and are an index of the intellectual and moral character of the people to whom each revelation has been made, and the God of the same religion does unquestionably advance with the mental evolution of the people professing it, being differently conceived of at different stages of culture. Art, in its early infancy, when it is, so to speak, learning its steps, endeavours to copy nature, and, copying it badly, exaggerates and caricatures it, whence the savage's crude notion of a god; but the aim and work of the highest art is to produce the illusion of a higher reality, whence a more exalted and spiritual conception of Deity.

Notwithstanding the Archbishop's charge of atheism
VOL. XV.

against science, there is hardly one, if indeed there be even one, eminent scientific inquirer who has denied the existence of God, while there is notably more than one who has evinced a childlike simplicity of faith. The utmost claim of scientific scepticism is the right to examine the evidence of a revelation professing to be divine, in the same searching way as it would examine any other evidence—to endeavour to trace the origin and development, and to weigh the value, of religious conceptions as of other conceptions. It violates the fundamental habit of the scientific mind, the very principle of its nature, to demand of it the unquestioning acceptance of any form of faith which tradition may hand down as divinely revealed. When the followers of a religion appeal, as the followers of every religion do, in proof of it to the testimony of miraculous events contrary to the experience of the present order of nature, there is a scientific fact not contrary to experience of the order of nature which it is incumbent to bear in mind, viz :—That eager and enthusiastic disciples sometimes have visions and dream dreams, and that they are apt innocently to imagine or invent extraordinary or supernatural events worthy the imagined importance of the subject, and answering the burning zeal of their faith. The calm observer and sincere interpreter of nature cannot set capricious or arbitrary bounds to his inquiries at any point where another may assert that he ought to do so; he cannot choose but claim and maintain the right to search and try what any man, Jew or Gentile, Mussulman or Brahmin, has declared sacred, and to see if it be true. And if it be not true to him, what matters it how true it be? The theologian tells him that the limits of philosophical inquiry are where faith begins, but he is concerned to find out where faith does begin, and to examine what sort of evidence the evidence of things unseen is. And if this right of free inquiry be denied him, then is denied him the right to doubt what any visionary or fanatic, or madman, or impostor, may choose to proclaim as a revelation from the spiritual world.

Towards the close of his lecture the Archbishop, breaking out into peroration, becomes violently contemptuous of the philosopher who, "with his sensations sorted and tied up and labelled to the utmost, might," he thinks, "chance to find himself the most odious and ridiculous being in all the multiform creation. A creature so glib, so wise, so full of discourse, sitting in the midst of creation with all its mystery and wonder, and persuading you that he is the master of its

secrets, and that there is nothing but what he knows!" It is not very difficult to raise a laugh by drawing a caricature; but it was hardly, perhaps, worthy the lecturer, the subject, and the audience, to exhibit on such an occasion an Archiepiscopal talent for drawing caricatures. As we have already intimated, this philosopher "so glib, so wise, so full of discourse," does not profess to know nearly so much of the mystery and wonder of creation as the Archbishop does. There is more flourishing language of the same sort before the discourse ends, but it would be unprofitable to transcribe or criticise it; and it is only right to the lecturer to say that he is near his conclusion when he works himself up into this vituperative and somewhat hysterical ecstasy. The following passage may be quoted, however, as instructive in more respects than one:—

"The world offers just now the spectacle, humiliating to us in many ways, of millions of people clinging to their old idolatrous religions, and refusing to change them even for a higher form; whilst in Christian Europe thousands of the most cultivated class are beginning to consider atheism a permissible or even a desirable thing. The very instincts of the savage rebuke us. But just when we seem in danger of losing all may come the moment of awakening to the dangers of our loss. A world where thought is a secretion of the brain-gland,—where freewill is the dream of a madman that thinks he is an emperor, though naked and in chains,—where God is not, or at least not knowable, such is not the world as we have learnt it, on which great lives have been lived out, great self-sacrifices dared, great piety and devotion have been bent to soften the sin, the ignorance, and the misery. It is a world from which the sun is withdrawn, and with it all light and life. But this is not *our* world as it was, not the world of our fathers. To live is to think and to will. To think is to see the chain of facts in creation, and passing along its golden links to find the hand of God at its beginning, as we saw His handiwork in its course. And to will is to be able to know good and evil; and to will aright is to submit the will entirely to a will higher than ours. So that with God alone can we find true knowledge, and true rest, the vaunted fruits of philosophy."

Was ever before such a terrible indictment against Christianity drawn by a Christian prelate? Its doctrines have now been preached for nearly two thousand years; they have had the aid of vast armies, of incalculable wealth, of the greatest genius and eloquence; they are embodied in the results of conquests, in the sublimest works

of art, in the noblest specimens of oratory, in the very organisation of modern society ; thousands upon thousands have died martyrs to their faith in them, and thousands more have been made martyrs for want of faith in them ; they have been carried to the darkest places of the earth by the vehicles of commerce, have been proclaimed by the messengers and backed by the moral power of a higher civilization ; they are almost identified with the spirit and results of modern scientific progress ; all these advantages they have had, and yet the Archbishop can do no more than point to the spectacle of millions of people clinging to their old idolatrous religions, and to thousands of the most cultivated class in Christian Europe who are beginning to consider atheism a permissible or even a desirable thing. Whether it is really true that so many of the cultivated class in Europe are gravitating towards atheism we cannot say, but if the allegation be true it may well be doubted whether an appeal to the instincts of the savage who persists in clinging to his idolatry will avail to convince them of their error. It is not very consistent on the Archbishop's part to make such an appeal, who, in another paragraph of his lecture, emphatically enjoins on philosophy not to banish God, freedom, duty, and immortality from the field of its inquiries, adjuring it solemnly never to consent to abandon these highest subjects of study.

Another comment on the passage above quoted which suggests itself is that men have undergone great self-sacrifices, sufferings and death for a bad cause with as firm and cheerful a resolution as good men have for the best cause ; to die for a faith is no proof whatever of the truth of it, nor by any means always the best service which a man may render it. Atheism counts its martyrs as well as Christianity. Jordano Bruno, the friend of Sir Philip Sidney, was condemned for atheism, sentenced to death, and, refusing to recant, burnt at the stake. Vanini, who suffered death as an atheist, might have been pardoned the moment before his execution if he would have retracted his doctrines ; but he chose to be burnt to ashes rather than retract. To these might be added others who have gone through much persecution and grievous suffering for a cause which the Archbishop of York would count the worst for which a man could suffer. How many Christians of one sect have undergone lingering tortures and cruel deaths at the hands of Christians of another sect for the sake of small and non-essential points of doctrine in which only they differed—for points at

issue so minute as to "be scarcely visible to the nicest theological eye!" When the passions of men have worked a faith into enthusiasm they will suffer and die for any cause, good or bad. The appeal to the martyrdom of professors is therefore of small worth as an argument for the truth of their doctrine. Pity 'tis that it is so, for if it were otherwise, if self-sacrifice in a cause would suffice to establish it, what a noble and powerful argument in support of the Christian verities might archbishops and bishops offer, in these sad times of luxury and unbelief when so many are lapsing into atheism?

But we must bring to an end these reflections, which are some of those that have been suggested by the perusal of the archiepiscopal address on the limits of philosophical inquiry. Though heavy charges are laid against modern science, they are made in a thoughtless rather than a bitter spirit, while the absence of bigotry and the general candour displayed may justify a hope that the author will, on reflection, perceive his opinions to require further consideration, and his statements to be too indiscriminate and sweeping. On the whole there is, we think, less reason to apprehend harm to scientific inquiry from this discharge of the Archbishop's feelings, than to apprehend harm to those who are obstinately defending the religious position against the attack which is thought imminent. For he has used his friends badly: he has exposed their entire flank to the enemy; while he would distinctly have philosophy concern itself with the highest subjects—God, freedom, and immortality—despising a philosophy which forbears to do so, and pointing out how miserably it falls short of its highest mission, he warns philosophy in the same breath that there is a point at which its teaching ends.

"Philosophy, whilst she is teaching morals and religion, will soon come to a point where her teaching ends . . . She will send her scholars to seek in revelation and practical obedience the higher culture that she can only commence."

The pity of the matter is, that we are not furnished with a word of guidance as to where the hitherto and no further point is. With brave and flourishing words he launches the inquirer on a wide waste of waters, but without a rudder to guide him, or a compass to steer by. Is he to go on so long as what he discovers is in conformity with the gospel according to the thirty-nine articles, but to furl his sails, cease his exertions, and go down on his knees the moment his dis-

coveries clash with the faith, according to the thirty-nine articles? What guarantee have we that he will be content to do so? In withholding the Scriptures from the people, and shutting off philosophy entirely from the things that belong to faith, the Church of Rome occupies a strong and almost impregnable position; for if there be no reading there will be no inquiry, and if there be no inquiry, there will be no doubt, and if there be no doubt there will be no disbelief. But the union of philosophical inquiry and religious faith is not a natural union of kinds; and it is difficult to see how the product of it can be much different from the hybrid products of other unnatural unions of different kinds. H. M.

Force and Nature. Attraction and Repulsion. The radical principles of energy discussed in relation to physical and morphological developments. By CHARLES FREDERICK WINSLOW. Macmillan and Co., 1869.

DR. WINSLOW appears to be an American physician, who has travelled over a great part of the earth, and has given much zeal and energy to wide-reaching and somewhat vague speculations concerning the forces of nature. It is a little amusing to observe with what entire good faith the author, whose enthusiasm is constantly carrying him into hypothetical conjectures and assumptions, believes himself to be proceeding carefully and safely on the firm ground of observation. The real truth is, that he has a theory which he believes to be capable, when rightly applied, of unlocking many scientific secrets, and he has laid hold of facts, often opinions of facts, from all quarters of nature, and compelled them to submit to his principle and to range themselves in apparent support of it. In fact, he seems less disposed to solicit nature than to ravish her. The central idea of his book is that there is a force of repulsion, as well as a force of attraction, pervading nature universally, and he is amazed at the way in which this force has been hitherto overlooked. But has it been overlooked? If our memory serves us correctly, there was a book called the *Philosophy of Nature*, published by Dr. Boase expressly to prove the existence of such a force of repulsion. He maintained a real dualism of powers—attraction and repulsion, in all natural bodies, and repudiated the identity of force. Some years have passed now since we, without imagining that we were reading anything new, read as follows:—

"Though it may seem difficult to avoid the conclusion that there is fundamentally but one force which manifests itself under different modes, yet such a supposition at present transcends the domain of science. As a matter of fact, we are compelled, in order to form a satisfactory conception of matter and its forces, to regard it under a two-fold aspect. In all our conceptions we imply a sort of dualism of power in every body. The hinges of gravitation, for example, keep worlds in their orbits by opposing a centrifugal force, which would otherwise drive them afloat into space. The smaller hinges of molecular cohesion retain the infinitely smaller bodies which we call molecules of matter, in opposition to a repulsive force which, on the application of a little heat, may drive them off into space, and in volatile substances does so drive them off without heat. There is a relation of molecules to one another which we are compelled to represent in conception as the result of a force of repulsion or tension. . . Attraction plus repulsion of molecules constitutes our conception of matter; and in observation of its modes of energy, attraction is recognised in gravitation, cohesion, magnetism, while repulsion is found in the centrifugal force, in heat, and in electricity."

If, therefore, Dr. Winslow's speculations regarding repulsion and its modes of manifestation are not better founded than they are novel, they will hardly effect such a revolution in thought as he seems to expect them to do. The reader cannot fail to be struck with the immense amount of repetition in the book; over and over again we have the one idea of a repulsive force affirmed in nearly the same terms, and these not always put in the best style or with the best taste. Take, for example, a sentence like this, which is certainly built up what in America would be described as rather tall language:— "But when the mind rises to grand generalisations, and comprehends that the entire series of phenomenal events transpiring in the physical universe rests upon the simplest plan; that all spring from the action of one overruling law; that all flow from one incomprehensible central Being, whose ways are eternal and immutable—whose grasping, quivering arms, for ever stretching out and drawing back by turns, are nerved by the same invisible and immortal elements as our own, but which, shooting from the very central atom of the cosmos,

strengthen as they glide and tremble from star to star, spreading asunder and binding together atoms and worlds alike; that the wonderful agents of this universal power are the simple molecular activities of repulsion and attraction, developing from zero into infinite quantities, and assuming isolated cosmic conditions with mutual affinities and antagonisms;—when the mind embraces their simplicity unfolded into its infinite and amazing grandeur, philosophy will have discovered the natural path for a fertile, harmonious and happy solution of past and present celestial problems."

It is certainly a singular picture, which the author presents us, of the grasping, quivering arms of the one incomprehensible central Being, stretching out and drawing back by turns, nerved by the same immortal elements as our own, and gliding and trembling from star to star. The idea which is almost irresistibly suggested is that of a big polype. But the question of the value of Dr. Winslow's book is not a question of execution, but of the worth of the speculations which he broaches. It can hardly fail to do good to call attention, as as he has done forcibly, to the probable existence in nature of a force of repulsion co-extensive with a force of attraction, and to indicate the proofs of its action in the different phenomena of the various regions of nature.

The second part of the book contains numerous tables compiled from the study of seismic phenomena, and facts of the author's observation, in order specially to prove the existence and action of a force, "the dynamical relations of which are developed and intensified both in comets and in our own globe, in virtue of the reign of a cosmic law of *action and reaction proportionate to distances inverse*; that is to say, of a force which develops intensities of internal mechanical effects that increase and decrease directly as these bodies approach and recede from the sun."

The third and concluding part is occupied with "the solution of cosmical problems which have heretofore defied the penetration of speculative mathematics." We know not how it may be with others, but we find the proffered solutions to defy our penetration. It is a strange mixture of metaphysical speculation with physical theories, worked out, however, in strict accordance with the author's conviction that a true and enduring system of positive philosophy must embrace both physics and metaphysics. To us much of his speculation appears to be vague, barren and fanciful.

On the Identity of the Vital and Cosmical Principle. By R. LEWINS, M.D., Staff Surgeon-Major to Her Majesty's Forces. Lewes: Bacon. 1869.

The admission of the fundamental proposition of this pamphlet will result, Dr. Lewins tells us, in getting rid entirely of all religions, and in "effecting the same revolution in all the sciences, in medicine, and political legislation." Although we do not see how such sweepingly destructive consequences are contained in the doctrine that one force governs the whole universe of mind and matter, we are bound to give our readers a chance of conversion, and will, therefore, put Dr. Lewins' argument before them, as clearly as we can.

It appears that many years ago, he discovered that the respiratory action of the vagus nerve can be increased by a hyper-oxygenated agent, and instantaneously suspended by a de-oxygenated one. We are told nothing more of the experiments, which, he tells us brought him to this discovery, save that he was led to them during the process of restoring his health; anyone, therefore, who is satisfied with the soundness of the subsequent steps in the proof, may reasonably expect some further detail.

Dr. Lewins next proceeds to state that nerve-force and electricity are identical, on the grounds of the awe produced by thunder and lightning, the deep sympathy of all living beings with nature, and the similarity of the sensations produced by pressure on a nerve, and by the transmission through it of a galvanic current. Nay, electricity is not merely nerve-force, it is vital force in general; for oxygen and electricity are "consubstantial," and in every act of respiration we are, therefore, drawing into our blood the one force which is to perform all vital actions. But electricity itself is only one form of the universal force of organic nature; so that the identity of the cosmical and vital principle is thus established.

If we have carried our readers so far with us, they will probably look for some reasons for believing that oxygen and electricity are "consubstantial" (*i.e.* identical). The proof is as follows:—Water is not a compound of oxygen and hydrogen, but either oxygen or hydrogen, which are the same things under different arrangements of their atoms. So far Mr. Wilde supports our author, who may alone claim the merit of imagining that oxygen is electricity in its negative

form, hydrogen is positive electricity, both highly condensed into water.

We believed that we have omitted no essential steps in the argument; but the somewhat discursive style of the pamphlet may have deceived us. If our readers have been convinced by Dr. Lewins' reasoning, they will be quite prepared to receive the startling corollaries which we stated in the beginning of this notice; while those who remain incredulous, will probably not require us to assist them in drawing a more obvious, though less striking, moral.

Πρὸς δλίγα βλέψαντες, ἀποφαίνονται ρῆσον, was the judgment passed by the greatest critic of antiquity upon some of the attempts of Dr. Lewins' earliest predecessors to reduce the phenomena of nature to the operation of one single cause; is it not just as true in "the present age of demonstrated science," as in "former ages of comparative speculation and nescience?"

J. R. G.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

French Psychological Literature.

By JOHN SIBBALD, M.D. Edin., Medical Superintendent of the District Asylum for Argyleshire.

Annales Médico Psychologiques, vol. ix., x., xi. and xii., for 1867-68.

I. PHYSIOLOGY. "The Discoveries and Labours of Galileo," by M. Parchappe, analysed by M. Brierre de Boismont "Mittermaier, on Capital Punishment, &c.," by M. Brierre de Boismont. "Medico-psychological Studies on Shakespeare—Hamlet," by M. Brierre de Boismont.

II. PATHOLOGY. "Cretins and Cagots of the Pyrenees," by M. Auzouy. "Mental Diseases and other Affections of the Nervous System," by Prof. Griesinger. "Weight of the Body in Relation to Insanity," by MM. Lombroso and A. Laurent. "Mustard Baths in the Treatment of Insanity," by M. A. Laurent. "Insanity in Switzerland," by M. Lunier. "Acute Delirium produced by the presence of Ascaris Lumbricoides in the Oesophagus," by M. A. Laurent. "Lypemania accompanied with Spasms," by M. Dufour. "Combination of Digitalis and Opium in Cases of Mental Excitement," by MM. E. Dumesnil and A. Lailler. "Hereditary Transmission of Epilepsy," by M. Ach. Foville. "Manie raisonnante," by Dr. Campagne. "Action of the Nervous System in Intermittent Affections," by Drs. Le Menaut des Chénais. "Pathological Anatomy of General Paralysis," by Drs. Poincaré and H. Bonnet. "Cerebral Induration," by M. Dufour. "Pharmacology of Tincture of Aconite," by M. A. Lailler.

III. MEDICO-LEGAL REPORTS, &c.—"Victorine Crosnier—Wilful Fire Raising," MM. Bonnet and J. Bulard. "Medico-Legal Discussions," MM. Mettermaier and Dagonet. "Will made by a Suicide," M. Legrand du Saulle. "Jeanne M—, Lypemania; Pierre M—, Alcoholic Dementia; François-Joseph Pisser, Assassination," by M. Dagonet. "Bequest made during the last stage of Typhoid Fever," by M. Legrand du Saulle. "Aug. Marcilla, Wilful Fire Raising; M. Bennefous G—, Assassination," by M. V. Combes. "R—, Assassination," M. V. Combes. "J. N. Georges, Murder—Alcoholic Insanity," by M. Bonnet and J. Bulard. "Francois C., Wilful Fire Raising and Homicide," M. Etoc-Demazy. "Aug. Veyssieres, Assassination and Fire Raising," M. Bonnefous. "Joseph Laurent, Murder," M. H. Bonnet and J. Bulard. "Jarry —, Simulated Insanity," by Dr. Billod. "M. E. M—, Lecherous Impulse," by Dr. Lafitte

IV. ASYLUMS.—"Naugeat," by M. Fougères. "Prémontré," by M. Dagron. "The Abendberg and Dr. Guggenbuhl," by M. Auzouy. "Asylums for the Insane," by M. Le Menant des Chénais. "Voluntary Confinement in Asylums," by M. Lunier. "Escapes from Private Asylums," Dr. Chatelain.

Cretins and Cagots.—M. Auzouy, the superintendent of the asylum at Pau, gives a full account of these two unfortunate classes of people. In comparing the frequency of cretinism in the Pyrenees with that in

other infected districts he quotes the statement of the *Gazette de Savoie*, that the number of goitrous individuals in the Alps of Savoy amounts to 12,000 in a population of about 600,000. Supposing then that one sixth or 2,000 of the goitrons are cretins he concludes that the proportion is one cretin to 300 of the population. The proportion in the valleys of the Pyrenees he calculates as 400 in a population of 500,000, or one cretin in 1,250 inhabitants. In spite, however, of this comparatively favourable view the condition of the Pyrenean valleys is bad enough to deserve more attention than it receives from either private or state philanthropy. The measures proposed by the author are :—

1. The adoption of suitable treatment for all cretins who are curable or susceptible of amelioration. 2. The admission into asylums of all those who vegetate miserably among their relatives, and who usually perish there prematurely of want and marasmus. 3. Transplantation (to localities which are elevated, well aired, and exposed to the sun) of cretins or cretinous individual, who reside in confined, unhealthy valleys. 4. The construction on communal lands, in good situations, of simple dwellings of good hygienic construction, where cretins and their families might live without being inconveniently removed from their previous abode. The attempt to cure must always be less successful than the attempt to prevent, and the author consequently calls on the administration to step in and aid in that more important work. "The opening of new roads, the reclaiming of uncultivated hill lands in good situations, the carrying on of public improvements in the cretinous valleys, would be of immense use in setting a civilizing current in motion, and increasing the well-being of the population. Without denying the importance of the presence of iodine in the water as a cause of goitre, we have the conviction," continues the author, "that the majority of goitrous persons would be more improved by a good daily meal of meat and wine than by the absorption of an iodized preparation."

The *cagots*, though frequently named along with cretins, are so altogether different from them that they have scarcely any claim to the special attention of the medical profession. Their condition is, nevertheless, one which must greatly interest the psychological pathologist, as it presents one of the best examples of the action of moral causes in causing, or at least contributing to produce degeneracy of race.

For their origin we are referred back to the commencement of the fifth century, when the Goths invaded the neighbouring portions of Gaul and Iberia, and succeeded in establishing themselves on both sides of the Pyrenees. During about a century these conquerors ruled the land which they had subdued; but they were in their turn overcome by Clovis, and their broken remnants took refuge among the Pyrenean valleys. Their descendants have continued to inhabit these secluded retreats, broken in spirit, and during long centuries despised by the neighbouring races. Their name of Cagot,

said to be derived from Can Goth—*Chien de Goth*—indicates the estimation in which they have been held. So deep was this contempt at one time carried, that they were only admitted to the churches by a door kept specially for their use; they were sprinkled from a special font, and a ditch separated their graves from those of other men. Since the revolution of 1789, these rigours have necessarily abated, but the Cagots still remain a degraded race, exhibiting no sense of personal dignity. “They still submit to the obligation to separate their habitations by a stream of water from those of different race, and to render them the most humiliating service. They mingle neither in their joys nor sorrows, and they do not resent the imputation of being unwholesome, noxious, and repulsive. Marriage beyond their own caste is a thing almost unknown.” M. E. Cordier received the following story from an old man of Ayzac, near Argelés. “A young man was in love with a maiden, who returned his affection. She was beautiful and virtuous, and he unceasingly implored her to marry him. The girl refused, saying, ‘Ah! if you only knew, you would ask me no more.’ At last he was one day so importunate that she said, ‘Here is an apple; we will divide it in two; you take one half and keep it under your arm-pit during the night. I shall do likewise with the other half. I will bring mine to you to-morrow, and you will bring me yours.’ The next day the young man brought his half apple, which was perfectly sound. The young girl mournfully showed him the half which had been kept under her arm. It was completely rotten. The poor child was a Cagote.” Such stories as this tell in the most graphic manner the feeling with which these unfortunate people are regarded. When the cholera prevailed in the district, the Cagots were accused of having attracted or introduced it. Hailstorms, the oïdium, distempers, and atmospheric pestilences, are usually attributed to them. According to the ancient *For* of Bearn, seven Cagot witnesses were required to countervail the evidence of one ordinary person. They had to perform all sorts of statute labour, but were not permitted to carry arms, nor to choose their trade. Those of weaver, cobbler, cooper, wood cutter, and carpenter, were almost exclusively reserved for them. They were obliged to wear, as a distinctive mark on their clothes, the claw of a goose or a duck.

There is still much of the feeling which is illustrated in these laws, prevalent in these districts.

In external configuration there is nothing in these people to denote their condition. They are well formed, and ordinarily intelligent looking. Indeed, with the exception of a peculiarity in the formation of the ear from which the most highly civilised races are not quite free, there is nothing which can account for their condition, except the law, which seems to hold good everywhere that a dominant race always tries to keep down an inferior one until the inferior gains strength enough to assert its equality; and in this case the inferior race has been too weak numerically to make head against the adverse circumstances in which it has been placed.

Weight of the Body in relation to Insanity.—M. Laurent, of Marseilles, criticises favourably Professor Lombroso's views on this question. According to the latter, the weight of the body affords a valuable aid in diagnosis and prognosis. In a case of suspected simulated mania, he considers that the circumstance—that the weight did not decrease—would be strong evidence in favour of the existence of imposture. And in cases when as regards mental symptoms there is an appearance of cure, there is good reason to fear a rapid relapse, if the recovery have not been accompanied by increase of bodily weight.

Mustard Baths in the Treatment of Insanity.—M. Laurent recommends the use of such baths of a strength sufficient to produce general rubefaction after immersion, for a period of half-an-hour to three quarters. "In general," he says, "in the maniacal forms, the tissues having been long in an irritated condition demand repose for the organ, but when the acute stage has passed, a stimulus sometimes aids the resolution of the evil. The renewed activity communicated to the brain favours its return to a normal condition." In melancholia he has not found the baths useful, and especially when there is the complication of stupor, he considers the wet sheet a more valuable remedy, and he is also in favour of the use of the seton in such cases. In "nervous" and hysterical insanity, he considers the effect of the mustard baths to be peculiarly satisfactory and attributes the recovery of several patients to their use. He also attributes the recovery of a case in the first stage of general paralysis to the same agent.

The Abendberg and Guggenbuhl.—M. Auzouy, who in his paper on cretins and cagots, had spoken in a laudatory manner of this institution and its director has revised his opinion, and after some apparent hesitation has come to the conclusion that M. Guggenbuhl was a quack, and the institution not philanthropic. He gives the subject lengthened consideration, and if there be any still requiring to be convinced of the truth they may with advantage refer to the paper.

Acute Delirium resulting from Ascaris lumbricoides in the Oesophagus.—The following interesting case is related by M. Laurent:—"A female, forty-eight years of age, following the trade of a grinder, was admitted to the Marseilles Asylum on the 24th of April, 1867. She was transferred from the department of Var. Very meagre information furnished in writing gave us to understand that a sister of the patient had died at the Asylum of Saint-Pierre. It was not ascertained that any other members of the family were insane. In the village where she lived she led a very respectable life. She was a widow and provided by her labour for the support of her two children. Menstruation had ceased. Towards the end of the winter she had manifested symptoms of mental derangement; but especially during the last six days the delirium had been very intense and the excitement extreme. She shouted, tore her clothes and refused food of every kind.

"When I saw the woman, I recognised an acute delirium of the most violent character. She had not slept during the night, she was continually in motion, rolling on the floor, breaking her furniture to pieces, and uttering a torrent of incoherent and unintelligible words. It was impossible to obtain any reply to the questions which I put. The face was very pale, the eyes much congested and the expression grimacing. Respiration appeared impeded and laboured. Ordered an ordinary prolonged bath with a stream of cold water on the head, refreshing drinks, and light food. The next day the physical and mental condition was the same. There had been no change since her admission to the asylum. It was impossible to get her to take anything. She refused even liquids. She was constipated.

"On the 28th April, in the afternoon, she was seized with vertigo. She was carried to bed. Her face was pale, the limbs very feeble, the countenance expressionless, the tongue dry, the saliva thick, white, and gathered about the corners of the mouth. The pulse is small, compressible 70 in the minute, and the skin dry. I could obtain no answers to questions. Constipation persists. Ordered—Sinapisms to the extremities, and enema with 30 grammes of sulphate of soda. The remedies were applied immediately. Deglutition is difficult, she vomits everything she gets, lemonade with Seltzer water, tisane with wine, beef tea, antispasmodic potion, she could swallow none of them. On the 29th she was comatose, obstinately constipated, and unable to swallow any food.

"On the 1st May at two in the morning the patient died.

"The autopsy was made twenty-six hours after death. I ascertained, along with M. Eyriès, *interne* in the asylum, signs of cerebral congestion. The membranes were extremely injected, and presented numerous vascular arborisations. The vessels were gorged with venous blood. There was no adhesion to the cortical substance. The several sections of the brain revealed a considerable amount of sanguineous punctuation. The ventricles were filled with serum. The frontal part of the surface of the brain exhibited slight *ramollissement*. The heart was healthy, the lungs congested posteriorly. In withdrawing the thoracic organs, something was felt within the oesophagus, and on making an opening, we discovered a worm from 18 to 19 centimetres in length, and whose diameter at the middle, was about seven or eight millimetres. In colour it was darkish rose, and it tapered towards each extremities. This *ascaris lumbricoides* was alone and lifeless. Examination of the stomach and intestines revealed no more worms, and there was no alteration of the mucous membrane of the oesophagus. The large intestine was much distended by dry and hard faeces.

"There is no doubt that the predisposition was called into action by a very powerful exciting cause. The well-defined acute delirium was due to the presence in the oesophagus of the *ascaris lumbricoides*.

"In searching the records of the science for facts of this kind, I find that some have been noticed. They have only been recognized,

however, by the expulsion of one or more worms. As yet, we know of no characteristic sign which could indicate that a delirium resulted from the presence of worms in the oesophagus or in the stomach. It is, however, to be remarked that the form of mental derangement which has been observed, has always been a continuous and most violent excitement, followed by considerable debility.

"As regards the present case, a diagnosis of the helminthic affection was impossible. The information which had been obtained was too deficient to enlighten us as to the onset and the real cause of the mental affection. The patient herself was incapable of replying to our questions, or of making us aware of the sensations, which she might have felt about the back of the throat. The difficulty in swallowing is a characteristic symptom of acute delirium, and seems to depend on a convulsive condition of the pharynx and glottis. The different and numerous attempts made to obtain the ingestion of even liquid food were fruitless—only a result which we too frequently meet with, and which in such over-excited cases, it is, unfortunately, impossible to overcome. Usually the dysphagia disappears along with the nervous spasm, and it is prudent to avoid every violent measure which may abrade the digestive mucous membrane, and subsequently lead to dangerous revulsion, such as local inflammation, even of a gangrenous nature. In these circumstances, I consider that I proceeded as prudently as possible.

"This case furnishes an opportunity of insisting on the necessity which exists for such information as can be afforded by the relatives of patients. We asylum physicians are, unfortunately, only exceptionally applied to at the beginning of those affections, which lead to the sequestration of the insane in our establishments. We ought, therefore, to insist on the relatives and the family medical attendants, procuring for us the most circumstantial details of the evolution of the first symptoms, and of the causes of every kind which may have produced the morbid condition which is confided to our treatment.

"I do not wish to dissemble the difficulties which surround the diagnosis of conditions which really depend on the influence of intestinal worms, and it is not without interest to enquire carefully whether it be possible to throw some light upon this important point. As has just been said, I arrived at this conclusion while making research, that in cases where *ascaris lumbricoides* had penetrated to the stomach or oesophagus, and had produced morbid manifestations, there was observed a continuous and most violent excitement. This acute delirium made its appearance suddenly, and was accompanied by more or less limited convulsive phenomena. Esquirol, Ferrus, Frank, Vogel, Rolland, and Friedreich, noted this form in the cases which they record. In carefully examining, therefore, the conditions under which this manifests itself, it may, perhaps, be possible to attain to a diagnosis by the method of exclusion. I do not believe it necessary to enlarge on the characteristics of acute

delirium. The labours of MM. Brierre de Boismont, Calmeil, and Semelaigne, and the experience of the principal alienists have placed beyond doubt the existence of a special form which might be confounded with meningitis, hyper-stimulation of hysteria, or with mania, and which consists in an irritative congestion of the meninges and of the encephalon itself. The principal causes which have been recognised as producing this acute delirium, are mental exertion convulsive seizures, sunstroke, forced marches, alcoholic beverages, cerebral congestions, febrile diseases, and rheumatismal metastases. There is no mention of the migration of intestinal worms.

If we now inquire into the circumstances which favour the production of these parasites, we find hereditary predisposition, the lymphatic temperament, and sex. Women appear to be more subject to them than men. Eruvcilhier has, in the *Dictionnaire de Medecine et de Chirurgie Pratique*, especially insisted on the effects of incomplete assimilation of superabundant nutritive materials. The bad quality of the food ought, however, to be blamed not less than the quantity, as also atmosphere vitiated and unfit for promoting nutrition. If we add want of exercise, depression, disappointment, and generally all debilitating causes, one will have a concourse of circumstances such as would powerfully contribute to the multiplication of intestinal worms. These causes have as their predominant result the vitiation of the nutritive fluid, and the production of anæmia, which is so powerful a cause of acute maniacal insanity. Thus one might suppose that the helminthic affection acted upon the nervous system in the same manner as deteriorators of the blood, profuse haemorrhages, prolonged lactation, &c. The general symptoms have a considerable resemblance to those produced by anæmia and chloro-anæmia. But the analysis of facts does not permit us, in my opinion, to attribute solely to this cause—that is, to the vitiation of the blood,—the manifestation of maniacal excitement. There must always be a cause of at least considerable intensity in addition to this, so to speak, preparatory condition. I do not wish to exaggerate the pernicious effects of intestinal worms; and I am quite aware that the presence of worms in the intestines does not always produce appreciable symptoms; it is compatible with perfect health. But in cases sufficiently frequent it manifests itself by very variable phenomena. (Davaine, *Traité des Entozoaires*, p. 48). This author remarks that when the worms leave the intestines and reach other organs either by natural or accidental routes, they provoke new symptoms or lesions. Serious lesions are generally attributable to the migration of the ascaris lumbricooides. These phenomena take place in a sudden manner, and then it is that an analysis of the antecedent state draws attention to certain manifestations to which no regard had been paid, on account of their irregular appearance or unusual character.

I am inclined to think that this affection has been frequently misconstrued, and that symptoms which have been principally due to the

influence of these parasites, have been attributed to enteritis of a nervous character. The administration of anthelmintics would have set the question at rest in the most satisfactory manner, and without danger to the patient in cases where intestinal worms were not the cause of the intestinal disorder. Dr. Davaine insists strongly on the microscopic examination of the faeces in cases where worms are suspected; as the presence of ova may always be detected in the stools. I think that this means of diagnosis ought not to be neglected in cases of acute maniacal delirium preceded by gastric symptoms of some duration.

The case which has been the subject of this notice suggests still further for our consideration, that the disorders and serious lesions produced by worms pertain to an order of phenomena known as reflex. I need not enlarge on the explanation of these organic actions; numerous experiments show that they are phenomena produced by irritation of the nerves of the great sympathetic. This irritation is conveyed to the central organ. If this does not possess sufficient force to annihilate or neutralise the effect; if it is even prepared already by a morbid condition of some duration or by special predisposition, very grave symptoms supervene and most frequently lead to a fatal termination. The aggregate of these etiological conditions constitute a morbid condition which has received the name of sympathetic insanity. I need only at present refer to the works of MM. Loiseau and Azam, the remarkable discussion which took place in the *Société médico-psychologique*, the works of M. le docteur Morel, the papers of MM. Dumesnil and Auzouy in the *Archives cliniques* of mental and nervous diseases. While accepting the idea of sympathetic insanity, I must say that that category is more theoretical than practical; for it is extremely difficult by the examination of symptoms and without further information to distinguish at present a sympathetic insanity from one which is idiopathic. Treatment certainly could only gain by such a distinction, and our efforts should be directed to furnish marks which may aid us in the differential diagnosis.

"There is a question which occurred when ascertaining that the form of insanity produced by the presence of worms in the oesophagus is acute maniacal insanity or acute delirium, is the lesion of the oesophageal nerves capable of determining one form of delirium rather than another. The feeling of constriction, or whatever may result from the alteration of cesophageal branches which belong to the laryngeal plexus or to the thoracic portion of the great sympathetic; may it not have some special echo in the intracranian nervous system? And might it not happen that certain transitory manifestations of acute delirium might have as a cause a morbid sensation such as that to which I allude. I merely throw out the idea at present. It requires complementary facts."

M. Laurent adds in a note a fact which he found among the records of the Asylum of Fains, narrated by his predecessor Renaudin. That

physician, it appears, had succeeded in cutting short, or rather suppressing a periodic acute mania supervening at the menstrual periods by the application of leeches in the neighbourhood of a varicose enlargement of the thyroid gland.

Asylums for the Insane.—Dr. le Menant des Chesnais discusses the attacks which have recently been made on the officials of asylums in France, and the suggestions which have been made for a reform in the law relating to their administration. He examines in detail the provisions of the present law, and arrives at the following conclusions:—"As regards inroads on individual liberty, it is unheard of that a superintendent of an asylum has ever been unfaithful to his trust, and the accusation consequently falls of itself. As regards the inefficiency of treatment and the mortality, our reply is as short as it is conclusive. We require in the first place the removal of the aged, the paralytics, the epileptics, the harmless idiots, &c., which impede everything that we can do, and the proportion of mortality will then be reduced to the same degree that the cures will be increased. The law has sufficiently provided for every case, it has been judiciously conceived, and if more is insisted on, only evil results will be obtained, and these will be in proportion to the new requirements. The cure is not to be obtained in a law itself, but in its proper administration with a due regard to prudence and vigilance. If abuses have occurred from non-observance of the law of 1838 so simple and easy to administer, the administration of a more severe law, being necessarily more difficult, would be so much the less efficacious as it would be less practicable." On the whole the author is satisfied that the present law in France is a wise one and only requires to be carefully administered.

Case of Lypemania complicated with Spasms.—Dr. Dufour, as assistant physician at the Asylum of Armentières (Nord), relates the following case:—An unmarried female, 50 years of age, of a nervous temperament, and feeble constitution, was admitted to the Asylum of Dijon, in November, 1866. A niece was insane. Before her admission she was servant to a person in poor circumstances, who was unable to pay her any wages, whom she served from pure affection, and with whom she had to suffer many privations. Hitherto she had been moderately intelligent, and had received elementary education. She was always orderly in her conduct. Menstruation ceased long since. When eighteen years of age the menses were suppressed, and she then had a short lypemaniac attack, after which she was subject to hemicrania and nightmare. Her sister, from whom this information is obtained, does not appear to be very intelligent. She says further that for several months she has been liable to vomiting and pain in the epigastrium, which had been referred by several physicians to a cancerous alteration of the coats of the stomach. She was at the same time attacked with an affection of the scalp, which, however, had benefited much by emollient applications. In the latter part of September she was seized with erysipelas of the face, which extended

to the neck and scalp, and produced considerable swelling of these parts. On the first of October she was improved, and she rose to look at herself in the mirror, her face being at that time in the condition usual in persons in the last stage of erysipelas; but she was so struck with the appearance, that she began immediately to cry that she was a monster, that she felt something was going wrong in her head, and that she should become mad. Since then she had been odd—melancholy, saying that she was affected with an incurable disease, thought that any treatment would be useless to her, ate little, scarcely slept, and was almost continually oppressed by depressing ideas.

She was in the asylum till the 6th of February following, when she died. While an inmate she had eaten little, generally refusing what was given to her, from fear that it would injure her, and frequently vomiting what she was prevailed on to take. Everything that occurred she interpreted by the light of her depressed emotions. She was generally constipated. She became much emaciated before death, and towards the end became comatose. She also suffered while in the asylum from contractions of the anterior muscles of the trunk.

Autopsy forty hours after death. No cadaveric rigidity. Phlyctenæ and eschars on the toes. Bones of the skull, thin membranes of brain distended with serum, and easy separable. The brain appeared as if enveloped in gelatinous substance, but this condition disappeared when all the serum was evacuated. The ventricles were full of serum; the two hemispheres equal. The whole encephalon was soft and infiltrated with serum. The stomach was contracted, and the coats thickened; the mucous membrane of a livid red, and its folds very prominent. The membrane was not softened, but presented points of about two milimetres square in size, black and gangrenous-looking, surrounded by a grey circle of about one milimetre in depth. There were, besides, some five or six slight erosions about the size of a lentil. The large intestine was filled with small scybalous masses from the cæcum to the anus.

In considering the relation between the symptoms and the *post mortem* appearances, the author attributes the coma to the large effusion of the serum within the cranium. He does not, however, think that the previous symptoms are to be referred to the same cause, but rather that the effusion was the final result of anaemia, resulting chiefly from inanition. The insanity he attributes especially to debility, acting on a predisposed nervous system, and attributes the onset of the last attack to the meningitic congestion to which erysipelatous patients are so liable. Both the appreciable cerebral lesions and the gastric condition he attributes to deficient nutrition, which latterly had been more the result than the cause of the insanity.

The Life and Labours of Galileo.—M. Brierre de Boismont gives a short resumé and criticism of the late M. Parchappe's treatise on this subject. The tendency of the essay may perhaps be most easily under-

stood by the following quotation : " Galileo," says M. Brierre, " was morally a representative of his age : deficient in native firmness of character, as Scarpa has clearly shown, conceited, but without real personal dignity, he combatted the malignant baseness of his enemies by subterfuge and pusillanimity. Occasionally, however, the consciousness of his own worth made him forget his artifices of language and genuflexions before the great ; and his tirades obtained additional force from the irony and disdain which he showed for his detractors. The arguments which he borrowed from the Holy Scripture, and which his subtlety made him believe unassailable, were the very weapons used by his enemies to overthrow him. And it was not for want of warning that he committed this serious error. Cardinal Barberini, at that time his friend, said, ' We are not concerned with taking up the side of Ptolemy or Copernicus ; but above all things keep within those limits which should circumscribe physics and astronomy.' Monseignor Dini wrote to him : ' The theologians will admit the mathematical discussion as relating to a simple hypothesis, and as they say was the manner of Copernicus. That liberty will be granted provided that the sacristy be not entered.' Paolo Scarpi also pointed out the rock which caused his destruction. In the opinion of Parchappe, it was a proof of extreme confidence in himself and his friends, among whom were a future Pope and a Medicis, to imagine himself able to contend against Rome ; but it was no proof of perspicuity. What was persecuted in Galileo—what was attempted to be stifled by terror, was not so much an astronomical hypothesis, as the liberty of scientific investigation ; and what Galileo has especially upheld when defending Copernicus and himself, is the right of science to develope itself in all the plenitude of its independence."

Insanity in Switzerland.—In a series of elaborate papers on this subject, M. Lunier has collected nearly all the official information at present obtainable in regard to it. He gives a sketch of the laws affecting the insane, the provision which has been made for their care, and the circumstances which appear to him to influence their numbers and condition. It is impossible to do more than indicate a few of the more definite conclusions at which he has arrived. In regard to the influence of the configuration and constitution of the soil he remarks. 1. That in the mountainous regions the idiots and cretins are more numerous than the other insane in the proportion of 159 to 93. 2. That in the plains the number of insane (*fous*) is about the same as that of cretins and idiots. 3. That insanity is less frequent, and cretinism on the contrary more frequent on the mountains than on the plains. 4. That mental affections (insanity, idiocy, and cretinism) are more common on the mountains than the plains, the proportion being 252 to 214, or very nearly 7 to 6. A memoir by Schneider, on the statistics of insanity in the canton of Berne, contains some observations worthy of consideration. There are in the canton three very distinct geological formations—tertiary, Jurassic limestone, and "alpine."

In the region where tertiary formations predominate, the proportion of idiots and cretins in the population was one in 271, or 3·70 per cent., and of other insane one in 825, or 1·21 per cent. In the Jurassic limestone region, the idiots and cretins were one in 614, or 1·62 per cent., other insane only one in 2,098 or .46 per cent. In the alpine region the cretins were one in 361, or 2·76 per cent., other insane only one in 742, or 1·33 per cent. In all the districts the population is German speaking, principally engaged in agriculture, Protestant in religion, except in the Jurassic district, where it is Catholic. Thus there was, at the period between 1836 and 1839, when the statistics were taken, the least proportion of insanity in the region distinguished by the presence of Jurassic limestone, and the greatest proportion in the deep alpine valleys; and it is in the vast plateau situated below the Alps and the Jura, where tertiary formations prevail, that the greatest amount of cretinism is to be found. It is also in the last-mentioned districts that, as might be expected, the largest proportion of deaf mutes is found, being one in every 116 inhabitants. We give these calculations, as M. Lunier apparently attaches some importance to them; but the connection between the geological formation and the prevalence of insanity which is indicated, appears to be more apparent than real.

The number of the insane in Switzerland, who are confined in asylums, is small in comparison with many countries. In 1867 there were in all the special asylums about 2,100 insane, and to this may be added 400 or 500 insane, including idiots and cretins, scattered among the mixed *maisons de santé*, hospitals and poor houses. This taken in connection with the total number of insane, 7,174, gives the proportion of a little over one in three in confinement. In investigating this distribution more in detail it is found that in the several cantons the proportion in confinement is almost in direct ratio to the wealth and density of the population. In France the proportion in confinement is one in every 1,100 inhabitants, and in every 2·46 insane, including cretins and idiots. In Belgium the number of insane secluded is one in 1·46.

The detailed descriptions of the different establishments given by M. Lunier, do not admit of abbreviation; but the general comparative review which he gives is important, especially as coming from one of such extensive knowledge as the French Inspector General.

"Of the ten establishments," he writes, "the three oldest, Champ-de-l'air, Königsfelden, and Zurich, have been admitted to be defective and insufficient, and are shortly to be replaced by magnificent asylums at great expense, away from the towns, and surrounded by extensive grounds. A fourth, les Vernettes, although founded in 1838, was established in a manner so satisfactory that it still nearly fulfills the requirements of the canton of Geneva, and the progress of psychiatric science. The enlargement which was effected in 1857, in the female division, and which is to be similarly carried out in the section

for men indicate that the canton has no intention of reconstructing its asylum. Three others, Münsterlingen, Bâle, and Saint-Pirminsberg, leave much to be desired. Münsterlingen and Saint-Pirminsberg, although admirably situated and considerably improved during late years, exhibit in their material constitution and the distribution of their sections for classification too serious deficiencies and imperfections, to be considered as good establishments. The two sections of the hospital at Bâle are not worthy of that ancient and rich city, and it is probable that it will not delay long in establishing beyond its walls a real asylum for its insane. The three last, Préfargier, La Waldau, and La Rosegg, which have been more recently erected, are on the other hand good establishments, though one cannot speak favourably of all their details. Préfargier, however, in spite of certain alterations which have been made on the original plan, may still be cited as a model of a small establishment adapted for both sexes. La Waldau pleases me less. The aspect is too dull, and the agglomeration of buildings suitable for a population of a hundred or a hundred and fifty patients is much too small for an asylum already requiring to afford accommodation for two hundred and fifty. The plan of La Rosegg does not appear to me to be a model for imitation. The distribution of some of its sections for classification is contrary to the necessities of psychiatrical science.

"I have not been able to obtain altogether satisfactory information regarding the dietary of the insane, except for five of the asylums which I visited, le Champ-de-l'air, Königsfelden, Münsterlingen, Saint-Pirminsberg, and La Rosegg. In these establishments the patients receive weekly of uncooked butcher meat :—

		Men.	Women.
Königsfelden	...	1750 grammes	1750 grammes
Münsterlingen	...	1750	1450
Champ de-l'air	...	1650	1650
Saint-Pirminsberg	...	1500	1500
Rosegg	...	1500	1080

"It is only during the last three years that the patients at Königsfelden have had 250 grammes of butcher meat daily. Previous to that time they were only allowed the same quantity three times a week. At Saint-Pirminsberg butcher meat is only given three times a week, 250 grammes for dinner and the same for supper. At the Rosegg, a Catholic district, the patients get no meat on Friday. At Champ-de-l'air, and at Münsterlingen they have it every day."

The proportion of recoveries in relation to the admissions and of death in proportion to the mean population is given in the table on the next page.

Number and proportion of Recoveries and of Deaths in the Swiss Asylums.

CANTONS.	ASYLUMS.	Recoveries.	Admissions.	Proportion per cent.	Deaths.	No. of years multiplied by mean number resident.	Proportion per cent.	YEARS.
Argovie.....	Königsfelden ...	31	82	37.8	23	266	8.6	1864-66
Bâle-Ville ...	Bâle	247	726	34	110	857	12.8	{ 1843-60 1863-65
Berne	La Waldau	98	220	44.8	62	868	7.1	1864-66
Saint Gall ...	St. Pirminsberg	68	226	30	29	366	7.9	1865-66
Geneva	Les Vernets.....	486	1367	35.5	371	2709	13.6	1838-66
Neuchatel ...	Préfargier	115	285	40	32	385.5	8.3	1864-66
Soleare	La Rosegg	70	276	25.3	68	690	9.8	1862-66
Thurgovia ...	Münsterlingen	213	626	34	124	846	14.6	{ 1851-54 1864-66
Vaud	Champ-de-l'air	95	373	25.4	94	902	10.4	1861-66
Zurich	Zurich	30	109	27.4	2	21	9.5	1860
		Totals	1453	4290	—	915	7910.5	—
		Mean	—	—	33.9	—	—	11.57

Combination of Digitalis and Opium in the Treatment of Insanity—
 MM. Dumesnil and Lailler strongly recommend the union of these drugs, especially in the treatment of mental excitement. They hold that the Tincture of Digitalis cannot be given *alone* in a dose of one gramme for several days, without frequently producing signs of intoxication, which may be the cause of serious results. “On the 17th of May last” (1867), say the writers, “we had in the asylum sixteen patients who were taking one gramme of Tincture of Digitalis daily. They consisted of a certain number of epileptics and some patients labouring under maniacal excitement. The tincture employed was prepared according to the old Codex of 1837. At the date we have mentioned, the supply of this tincture being exhausted, we prescribed similar doses of the tincture prepared according to the new Codex, and with Digitalis recently sent to us by our druggist. The next day one of the patients under treatment with the Digitalis suffered from nausea and vertigo; the pulse became slow and intermittent, shewing the signs of intolerance produced by the medicine. The use of it was discontinued and the symptoms disappeared. All the patients subjected to the same treatment exhibited the same symptoms to a greater or less degree, according to their differences of susceptibility. We had no very serious consequences to deplore; but one young epileptic

was so seriously affected as to oblige us to have prompt recourse to stimulant remedies, both externally and internally, after which, every thing went right. A short time before these events one of us analysed in the *Annales Medico-psychologiques* (May, 1867) a memoir extracted from the Journal of Mental Science, and wrote that in England the Tincture of Digitalis was given in doses of from one to two grammes, three or four times a day, in cases of maniacal excitement. What we had seen in our own experience showed evidently that the dose prescribed by our neighbours across the channel could not always be reached with impunity, and we take advantage of this opportunity to advise those of our *confrères* who have read our analysis, and would prescribe the Tincture of Digitalis to their patients, not to go much above the dose of a single gramme, and when they wish to go above it, to associate with the tincture some agent which may favour a tolerance of it. Opium indeed is the substance to be preferred; for in regard to it there is no antagonism between the two medicines, as there is in the case of belladonna and opium. We find in the effects produced by opium combined with digitalis both the action of the one and the action of the other, neither is there any incompatibility from a chemical point of view.

"We believe that the association of these two remedies, in the greater number of cases of excitement in the insane, obtains very advantageous and almost constant results, which have been rarely obtained from digitalis, opium, or bromide of potassium given separately. This note in no way invalidates the important labours of Drs. Williams, Crichton, Browne, and Robertson, lately analysed in this Journal. We would add, indeed, that Dr. Robertson, as would be seen, associates morphia with the Tincture of Digitalis, when it does not effect the expected benefit. But we have long observed that this tincture by itself, except in cases where it is desired to diminish the frequency of epileptic attacks, was far from satisfying us completely, as also all opiates prescribed alone, under whatever form. This combination permits besides the continued use of these two agents, without danger after the phenomena of excitement have given place to calm and docility.

Hereditary Transmission of Epilepsy.—M. Achille Foville discusses this question in a careful paper in which, however, he rests his statistical results on too narrow a basis to secure their unhesitating reception. Of most of them, however, there is at present little difference of opinion in our profession. He notes them as follows:—
1.—Epilepsy is transmissible by heredity. 2.—The proportion of ascendants who have suffered from epilepsy in the families of a given number of epileptics has not yet been calculated in a sufficiently satisfactory manner as to make us exactly informed in regard to it. 3.—The data are as yet much less complete in regard to the proportion of descendants of epileptics who suffer themselves from epilepsy. It is even possible that the causes of uncertainty and error connected

with researches of this nature will make it impossible ever to arrive at a satisfactory result.

4.—In order to approach this result as nearly as possible, and for the study of the other conditions of the hereditary transmission of epilepsy, it would be desirable that we should gather a considerable number of collective observations of families in which epilepsy is hereditary, and affects a more or less large number of persons. These observations ought to embrace several generations, and take exact account not only of the epileptics, but also of the insane, of infants dying at an early age, and of persons who are sane or are presumed to be so.

5.—According to some observations of this kind already collected, we may consider the following ideas as at least probable.

- a. Epileptic parents are in danger of losing a considerable proportion of their children at an early age.
- b. Among the survivors, about a fourth will suffer from epileptic attacks.
- c. Several will be insane.
- d. About a half will be on the brink of such disease.
- e. The further that a generation stands from the parent stem the hereditary influence is gradually enfeebled, and the number of diseased members afflicted by epilepsy or insanity becomes more and more restricted.
- f. Epilepsy has much more tendency to be reproduced in descendants of the same sex as the diseased ascendant than in those of the opposite sex.

6. Although the marriage of epileptics ought not to be proscribed by law, it presents such great inconveniences for the parties themselves, as well as for the issue, that it is to be desired that such unions should be as rare as possible. Physicians ought, therefore, to try to dissuade those who consult them on this point, by making them aware of the dangers to which they expose themselves by marriage.

Etiology and Pathogeny of "Manie raisonnante."—Dr. Campagne, Medical Superintendent of the Vaucluse Asylum at Montdevergues, discusses the origin and causes of moral insanity, in an interesting essay which formed part of the treatise rewarded by the *Société médico-psychologique* with the *Prix André*. The conclusions at which he arrives are obtained from the careful consideration of all the circumstances connected with fifteen cases of the disease. Among the circumstances affecting the several individuals, he finds alcoholic excesses in six cases; venereal excess in three; over-exertion of intellect in one; disappointments in four; powerful moral impressions in three; and insufficient food in two cases. These, however, he regards as being in most cases more properly regarded as effects of the moral weakness than causes of it. The real origin he finds in heredity. But hereditary, as has been observed by Lucas (*De l'hérédité naturelle*) "is not *per se* the first principle or origin of anything. It no more initiates predispositions and diseases than it originates the forms, colours, organs, instincts, dispositions, and faculties of beings." How, then, are we to regard it? The vice of constitution is derived from the parents; what is the nature of the vice, and what are the circumstances which regulate its transmission. It is of course im-

possible to present in a few sentences a complete view of the author's argument, but an idea of its nature may be conveyed. Those who are specially interested in the subject will find the original paper well worthy of perusal.

The whole question of hereditary influence is involved in the consideration, and is discussed at considerable length. The author's view is, what is now generally admitted, that in forming our idea of a pathological entity we must have regard not only to the individual person but also to the ascendants and descendants; that the seed sown in one individual may gradually be developed in successive generations of descendants until it arrive at the greatest possible development, or may under other circumstances be gradually blighted and destroyed. The manifestations of vitality exhibited by the pathogenetic cause may differ in succeeding generations in a manner analogous to what we know in the consecutive forms of life among zoophytes. Among physical manifestations of disease it has recently been held that cancer is the ultimate expression of the arthritic principle; and M. Bazin has lately directed the attention of physicians to the pathological unity of certain diseases of the skin which have been hitherto regarded as distinct entities. Looking then at the genealogies of his patients, M. Campagne finds that there is a remarkable similarity in the characters of their ascendants. Not as might at first be supposed that they present many instances of insanity; on the contrary the number of such is unusually small. "The intensity, or the degree of gravity of the mental deficiencies of the relatives of our patients diminishes as the genealogical series is ascended. We have in regard to this only a single proof, but it is clear, patent, and of decisive import. It is that insanity, absent in the third and second (previous) generations appears suddenly with great frequency (nine cases)." This will be best appreciated from the following table:—

Third generation	- No insanity.
Second generation	- No insanity.
First generation	- Nine cases of insanity. Twenty-one cases of insanity. Six cases of chronic diseases of the nervous system.
New generation	{ A large number of cases of early death.

The characteristic to which we have alluded as distinguishing the members of the earlier generations, is that of egotism (*égoïsme*); that is to say, a disposition to regard things from a subjective point of view, which may be a slight derangement, but is an unmistakably morbid condition. They also presented, in most cases, other slight indications of deficiency in mental vigour. In attempting to determine the original cause of this egoistic character, the difficulty of

obtaining accurate or full information has prevented the author from arriving at any satisfactory result. But he suggests, as probable, that the neglect of hygienic laws, such as excess at table or otherwise, would sufficiently account for the first deviation from a healthy type. Are we then to believe that egoism in one generation necessarily develops into moral insanity in a future one? Happily there is no reason to hold such a melancholy creed. There is need of the operation of another principle before the further development of the evil can take place. Persons with this egoistic failing may marry others labouring under the same defect; and the process may be repeated in the next generation. In fact, though the author deprecates any accusation of Darwinism, we have the principle of Natural Selection as explained by the celebrated naturalist. The cases which form the basis of M. Campagne's essay go far to support this view. All the facts in comparative physiology which bear on this subject tend to show how strong the tendency is in the progeny to exhibit peculiarities common to both parents, and generally in an exaggerated degree. With regard to the rate at which egoism may thus be developed into moral insanity, the author believes that the natural selection requires a long time and a considerable number of generations. "Our observations, where the series of egoistic types is well marked, justify this opinion, and lead us to think that, in the most favourable conditions, the selection requires at least four or five generations in order to create the pathological species studied in this treatise." The author also draws this comforting deduction: "It is absolutely impossible that a person endowed with a superior character should become morally insane (*maniaque raisonnant*), in whatever conditions he may be placed."

Pathological Anatomy and Nature of General Paralysis.—Drs. Poincaré and Henry Bonnet, summarise the results of their investigations in the following propositions:—

1.—"In general paralysis there is sometimes proliferation of the cellular tissue round the vessels; but it never goes so far as to diminish, nor *a fortiori* to occlude completely, the vascular canals. Consequently the functional and material alterations of the true nervous tissue cannot be attributed to a deficient supply of blood. In a word, there is no sclerosis of the encephalon.

2.—"The principal and constant alteration of the encephalon consists in the distortion and fatty degeneration of the cells. There is also found, but less frequently, *a.* globules of free fat in the midst of the granular matter, sometimes isolated, sometimes agglomerated; *b.* masses of granulations of a ferruginous tint not surrounded by a common envelope; *c.* pigment and haematosin in the walls of the vessels, and also fatty granules. Sometimes fatty granulations form large agglomerations at the periphery of the vessels. Enormous globules of fat, free or mixed with blood-globules, are often to be seen. The tubes are always intact.

3.—"We have found no modifications in the spinal cord, except a

greater abundance of ferruginous granulations in the cells in the neighbourhood of the ependyma.

4.—“The cells of the whole chain of the great sympathetic are coloured with brown pigment to a degree much more intense than in other subjects, from whatever affection they may have suffered. In the ganglia of the cervical region, and often in the ganglia of the thoracic region, there is evidently a substitution of cellular tissue, and of adipose cells for the nerve cells, which last are comparatively rare. Everything leads us to think that this is the anatomical starting point of the affection, and that the alterations of the encephalon are the mere consequences of the disorders, which this sclerosis, by a paralytic action of the cervical ganglia, produces in the cerebral circulation. There is always a very marked pigmentation of the spinal ganglia, and of those which are attached to the cranial nerves. The adipose cells, which are substituted for nerve cells in the ganglia of the great sympathetic, often exhibit a depth of colour, which may even be quite black.

5.—“All the alterations which we have described, produce disorders of nutrition in most of the organs—disorders which often end in fatty degeneration, or other modification of their elements, and which are manifested physiologically at first by ataxy, and subsequently by enfeeblement of all the functions, both of relational and vegetative life.”

PART IV.—PSYCHOLOGICAL NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE Third Quarterly Meeting of the Medico-Psychological Association was held, by the kind permission of the President and Fellows of the Medico-Chirurgical Society, at their room in Berners Street, on Thursday, April 29th; Dr. Sankey, M.D. Lond., F.R.C.P., President, in the chair.

The minutes of the last meeting were read. The Honorary Secretary explained that the resolution to send a letter of condolence to the widow of a distinguished honorary member not being within the power of a quarterly meeting, its transmission had been deferred to the annual meeting. The minutes were then confirmed.

Dr. SANKEY drew the attention of the Association to several microscopical preparations, prepared by himself, illustrating the morbid appearances in cases of general paresis.

Mr. KESTEVEN exhibited several microscopic preparations of disease of the brain and spinal cord, including a *Medulla Oblongata*, in which he had found a multitude of minute spots of "granular degeneration," and which he had described in the last number of the *British and Foreign Medico-Chirurgical Review*. At the same time, through the kindness of Dr. Barry Tuke, of the Fife and Kinross Lunatic Asylum, he had an opportunity of showing a comparison of this morbid specimen with similar changes observed in the brain of a person who had died of chronic mania, and which has been elaborately described by Dr. Tuke, Dr. Rutherford, and Dr. Skae, in the *Edinburgh Medical Journal*, Sept., 1868.

Dr. LOCKHART ROBERTSON read the following "Clinical Note" on THE HYPODERMIC INJECTION OF MORPHIA IN MENTAL DISEASE:—

In the first number of the *Practitioner*, July, 1868, Dr. Anstie has published a paper on "The Hypodermic Injection of Remedies," in which he truly says that despite the satisfactory working of the method and of the greatly increased power in handling remedies which it gives us, it is still very much unappreciated. Believing that this remark applies even to the employment of the hypodermic injection of morphia in the treatment of mental disease, I venture on this occasion to lay before the Medico-Psychological Association in the half hour we devote to Clinical Discussion, a brief outline of three successful cases illustrating the treatment by the hypodermic injection of morphia in recent mania, chronic mania, and melancholia respectively.

In October, 1861, Dr. W. C. Mackintosh published a paper in the *Journal of Mental Science* on "The Subcutaneous Injection of Morphia in Insanity," which first drew my attention to this method of treatment. In the Reports of the Somerset Asylum Dr. Boyd has also recorded his opinion of the value of this treatment in cases of maniacal excitement with sleeplessness, and in that form of destructive mania accompanied with dirty habits.*

* Extract from Nineteenth Annual Report of the Somerset Asylum:—"One female maniac, C. L., aged 35, single, most obscene in her conduct and language, noisy, destructive, and dirty, got rapidly well after the employment of the hypodermic injection of a solution containing half a grain of acetate of morphia."

Extract from Twentieth Annual Report of the Somerset Asylum:—"The hypodermic injection of about half a grain of acetate of morphia in mx. of distilled water has been useful in cases of maniacal excitement with sleeplessness"

The detail of the hypodermic method of treatment is carefully stated in Dr. Anstie's Paper, and to which I must refer those who desire further information regarding it. I use a solution of 6 gr. of the acetate of morphia to the drachm; Dr. Anstie's strength is 5 gr. I always commence with 6 m_l of the solution ($\frac{1}{2}$ gr.) and in only one case out of many hundred hypodermic injections of morphia has any injurious effects followed the remedy thus used.

CASE I. Recent Mania—J. H. W., No. 1,563, female, aged 20, single; domestic servant. Form of disease, acute asthenic mania.

History.—Never had any previous attack. No history of insanity in her family. Has been engaged for some years as a domestic servant. No reason can be given for her illness. It is stated that for the last three or four months she has been strange, and at times depressed, and that about three weeks ago she suddenly became maniacal, and had remained in a state of violent excitement ever since.

Progress.—On admission at Hayward's Heath, on the 22nd of March last, she was in a state of the most intense maniacal excitement, and very incoherent. Physically, she was suffering from marked typhoidal symptoms, her pulse was feeble and very rapid, her skin dry and harsh, her lips and teeth covered with sordes, her tongue coated with a thick creamy fur. She refused all food, and had had no sleep for several nights.

Although she could not be prevailed upon to take any solid food, she was coaxed at times during the first two days after her admission to take $\frac{1}{2}$ gr. of morphia in a little brandy, but she was almost invariably sick after it; moreover, the excitement continued, and she could obtain no sleep.

On the third day the hypodermic injection of $\frac{1}{2}$ gr. of morphia was commenced, and continued every four hours except during the middle of the night. On the fifth day she was calm, although incoherent, and had slept during the whole of the previous night, took her food well, and had lost nearly all the typhoidal symptoms. Moreover, the irritability of the stomach was completely allayed.

She has since recovered without a bad symptom, and she is now convalescent.

This case showed in a very marked manner the advantage of the hypodermic injection of morphia over its administration by the mouth in cases, which so frequently occur, of acute mania with marked asthenia and irritability of the stomach, causing refusal of food.

CASE II. Chronic Mania.—W. H., No. 950, aged 68, single, groom. Form of disease, chronic mania, characterised by frequent recurrent attacks of maniacal excitement.

History.—Strong hereditary taint of insanity. Nearly all his brothers and sisters are more or less insane or eccentric. Much given to habits of intemperance, but, although often strange and eccentric, was never sufficiently insane to warrant his being placed in a lunatic asylum until he was 64 years of age, when he was attacked with acute mania and removed to Hayward's Heath.

Progress.—During the attack of mania under which he was suffering when admitted into the asylum he was treated with small doses (mx.) of tincture of digitalis every four hours. The symptoms lasted for nearly three months. He was then calm for many weeks. On the next outbreak of mania, equal parts of liq. opii were added to the digitalis, and with a beneficial effect, the attack not lasting so long.

He was thus treated for some two or three years. He generally suffered from three or four attacks in each year.

In April, 1868, he had an unusually severe attack of excitement, combined with much noise and destruction of clothing. The usual medicines having no effect, he was treated with the subcutaneous injection of morphia (gr. $\frac{1}{2}$) three or four times in the twenty-four hours, and with marked benefit.

On the recurrence of the next attack subcutaneous injection was had recourse to at once, and the period of excitement was reduced to a little over a fortnight.

The next attack passed off in an equally satisfactory manner. In the January

of the present year an attack of recurrent mania being evidently imminent, the old treatment of digitalis and opium was tried for fully a fortnight, but without benefit. On February 8th $\frac{1}{2}$ gr. of morphia was injected, and the injection continued every six hours, and on February 10th (to quote from the case book) he was decidedly improved, and free from excitement and noise.

Not only, therefore, is the duration of the attack of recurrent mania diminished in this case, but during the attack the excitement is much less intense under the hypodermic method of treatment.

CASE III. *Melancholia*.—M. T., No. 1,395, female, aged 57, married, domestic servant. Form of disease, acute recurrent melancholia.

History.—No hereditary taint of insanity. Has been insane and confined in asylums three or four times. She is temperate in her habits, and her attacks of insanity appear to have followed on most occasions the puerperal condition, but the present illness is stated to be due to family troubles.

Progress.—On admission she was suffering from the most acute type of melancholia, combined with insomnia, refusal of food, and a strong suicidal tendency. Moreover she was in a poor physical condition, having lost much in weight, and being thin and anaemic.

In the first place she was treated with stimulants, sedatives, and a nourishing diet, but she remained from May 14th, the day of admission, until May 20th, without any improvement, and was becoming so reduced from want of sleep and constant worry, that her life was despaired of. On the 20th May, 1868 (to quote from the case book), "she passed a very restless night, and is much exhausted this morning: injected acetate of morphia gr. j, and she soon fell asleep; took her food well on awaking."

On the 23rd, "injected gr. j of morphia twice daily since the last entry, and with decided benefit, and she is much less excited. Sleeps well, and the suicidal tendency seems to have passed away."

On July 15th the entry is as follows:—"Has improved uninterruptedly ever since the last entry, and is now tolerably sane."

She was discharged recovered on 7th December, 1868, and has continued sane to this date, although in such a case another relapse is most probable.

An animated discussion followed.

Dr. CHRISTIE approved of the administration of opium in this form. He preferred its use in chronic cases. In the acute form of disease it seemed not so successful, at least, except in doses of hazardous strength.

Dr. TUKE said that he held in high estimation the hypodermic injection of morphia. He had no experience of any other drug. He believed that he was himself the first to try it in mania, as within a day or two of the publication of Mr. Charles Hunter's papers he had obtained permission for the effect of the injection of morphia to be tried at the Queen Charlotte's Hospital, in two cases of puerperal mania, and Mr. Hunter had obtained very satisfactory results in both patients. Dr. Tuke had found no benefit from its use in melancholia, and thought the frequent exhibition of small doses of morphia preferable. In cases where medicine was refused, the hypodermic injection was most useful.

Dr. SANKEY would ask if any member could explain the reason why the subcutaneous injection should be so much more powerful than when medicine was taken through the stomach. He inculcated the necessity for great caution in the use of the hypodermic injection. In one case under his own observation a patient died in two hours after the injection into the arm of a quarter of a grain of morphia.

Dr. SEATON, thought it probable that this result was rather the cumulative effect of former doses of opium, and asked what had been the previous treatment.

Dr. SANKEY in reply said that the treatment before had been carefully regulated. He thought fright had something to do with the fatal result, and that the operation itself was painful, and not to be undertaken without good reason.

Dr. CHRISTIE then read the following clinical case :—

J. N. E. was admitted in the North Riding Asylum on the 30th of October, 1868, suffering under an attack of chronic mania. He was 60 years of age and married, by trade a shoemaker, and of very intemperate habits, lymphatic temperament, and bodily health good. The duration of his disease had been eight years on admission. There was nothing unusual in the character of the symptoms, being very loquacious and the subject of various delusions; mostly of a cheerful character, and in fact he became quite the life and soul of the ward. There was not the slightest symptom of paralysis either in gait or speech, neither did he manifest any optimist delusions of any kind. He continued in the same state till Sunday, March 2nd, 1869, when he attended chapel; appeared as usual, but about 11.30 a.m. complained of sickness and the loss of use of the left side. Complete hemiplegia had resulted, his intellects were clear at this time, being able to describe exactly his feelings and state. The muscles of the tongue were slightly affected. He was placed in bed and gradual coma supervened till in about half an-hour it was complete. About 15 ounces of blood were taken from the veins of the arm, and a blister applied to the nape of the neck, 10 grains of calomel also being given. No change occurred, and he died in about eight hours.

The case is highly interesting, as revealing a remarkable disorganisation of the brain substance, without giving the slightest symptoms to have caused such a diagnosis during life.

On removing the calvaria it was found dense and heavy, the pœtis being filled up, losing its distinctive cellular character; the membranes were opaque and much thickened, the arachnoid containing a small amount of serum. The brain was flattened on the surface, and the sulci of the convolutions partly obliterated. On removing the brain a large amount of blood was found exuded at the base; but the exact origin from whence this came could not be detected. Slicing down the lobes it was found that the ventricles were completely filled with blood and clot, the walls of the lateral ones having given way, and the clot extending into the posterior lobes of the cerebrum. The right optic thalamus and corpus striatum were completely broken down and softened, easily washed away by the water trickling from a sponge. This also extended through the two conra and the superior surface of the pons varolii; in fact they were one mass of pulpy matter and completely broken up. The organ generally was soft. On examination by the microscope nothing but blood discs and nerve globules could be detected.

Dr. TUKE believed the case described by Dr. Christie to be one of meningal apoplexy, and that the ruptured artery had escaped observation.

Dr. SANKEY thought the symptom arose from sudden arterial rupture, arising in chronic, pulpy softening of the fornix of the brain.

Dr. BOYD was inclined to believe that the cause of death was the rupture of an artery.

Dr. SANKEY proposed a vote of thanks to the readers of the above cases, and called upon Dr. Boyd, to read his paper, *OBSERVATIONS ON THE CAUSES OF DEATH IN CHRONIC CASES OF INSANITY.* [Dr. Boyd's Paper is printed in Part I., *Original Articles*, p. 196.]

Dr. LINDSAY said he had listened with much attention to Dr. Boyd's paper; having himself paid much attention to the same question. There were several difficulties in the consideration of Dr. Boyd's views which the nature of his paper, dealing with statistics, rendered it very difficult to speak upon without the figures themselves. He understood Dr. Boyd to state the average of deaths from Phthisis to be about one-third of the whole. My experience would lead me rather to think one-fourth the average number of deaths from phthisis among the insane. He believed about one-fifth was the former frequent average. This frequency of consumption was induced by the deterioration of blood from overcrowding in asylums; from general anaemia; from the habit of sleeping with the head covered, &c. He thought Dr. Boyd's figures rather understated the case.

Dr. MAUDSLEY agreed rather with Dr. Boyd; his own experience had led to the same result.

Dr. SANKEY was reminded of the distinction, pointed out in an admirable paper by Dr. Clouston. In many cases of insanity, tubercles were found in the lungs, not causing death. In other cases they were the cause of death. He would remind the Association that phthisis was less frequent before than after puberty; and as adults were more numerous among the insane this would account for some difference. He had no doubt that asylum life tended to the development of lung disease.

Dr. CHRISTIE drew attention to the difference between town and country asylums, and the great variations that situation and temperature must make in the returns.

Dr. BOYD, in reply, stated that his paper dealt with figures, and required careful comparison with other results. Dr. Lindsay had considered all cases of insanity, and their liability to phthisis, whereas he, Dr. Boyd, had spoken only of the mortality in chronic cases. For the reason indicated in his paper, the mortality was less among males than females. As to per centage of death, he thought one-fifth per cent. much too little, and that the deaths from consumption among the sane were in much higher proportion.

Dr. BOYD, in reply, said that the wide range of his paper would render a full answer to the various speakers almost impossible. He was still of opinion that one-third of the cases of death should be ascribed to phthisis, but would remark that in his paper, he spoke only of chronic cases, whereas Dr. Lindsay considered all cases, acute as well as chronic. Dr. Boyd thought the tendency to phthisis certainly less in males than in females, and in this he believed he was in accordance with Dr. Guy.

Dr. SANKEY proposed a vote of thanks to Dr. Boyd, and then called upon Mr. Kesteven to read his paper—REMARKS ON THE USE OF THE BROMIDES IN THE TREATMENT OF EPILEPSY AND OTHER NEUROSES. [Mr. Kesteven's Paper is printed in Part I., *Original Articles*, p. 205.]

The PRESIDENT said that he had listened with much interest to Mr. Kesteven's able paper, and he trusted that the members present would give the results of their experience in the use of the medicine in question. He was happy to see Dr. Ogle among the visitors of the evening, and he was sure that the members would wish to hear any remarks from him as to his experience of the value of the Bromides in medicine.

Dr. OGLE had had but small experience as to the value of the Bromides in cases of insanity, in the other neuroses he had frequently prescribed it, and with good results. He had found small doses useless; in the case of one lady, for whom he had ordered thirty grains three times a day, drowsiness was the only effect produced. For the relief of pain, he thought opium better; there seemed to be no danger attending the exhibition of the Bromides. In one case, large doses were taken daily for seven months. Their value in epilepsy was decidedly very great, especially in cases in which the epilepsy depended upon perverted action in the capillary circulation.

Dr. MAUDSLEY had had considerable experience at the West London Hospital, and the result was to convince him that the large doses now in fashion were unnecessary; he never gave more than from six to ten grains. In a recent case under his own observation, a gentleman for whom large doses of the Bromides had been ordered for the relief of epilepsy, was in a dangerous condition, as it seemed to Dr. Maudsley, through the frequent administration of large doses of the drug. In cases of mania it was of no service; in the forms of insanity depending upon special vice, it was undoubtedly serviceable.

Dr. CHRISTIE was convinced of the great value of the medicine. He thought that its action was very different in the two sexes; he had seen some marked instances of cure from its administration in large doses in cases of insanity.

Dr. SABBEN was desirous to record his experience of the great value of the Bromides, more especially in the treatment of epilepsy. He had never seen any dangerous symptom produced by their use; on the contrary, much benefit from their employment in large doses. He instanced two cases that had much im-

pressed him: the first case gave much trouble, the erotic propensities of the patient leading him to attempt at rape, and rendering him absolutely dangerous. Under the use of the Bromide of Potassium this passed away; the memory returned, self-control was restored, and the patient left the asylum perfectly restored to health. The next case was that of a young officer, in whom fits of epilepsy were frequent and severe; the administration of the drug in large doses completely restored him to health. In no case had Dr. Sabben seen any danger to life, from its use, and he believed it to be a most valuable and efficacious remedy.

Dr. TUKE very frequently prescribed Bromide of Potassium, and found it specially efficacious in puerperal and hysterical mania, or epileptic mania. Its great value seemed to depend upon its power to relieve congestion by its action upon the capillary circulation. Dr. Tuke, however, had found large doses—twenty or thirty grains—absolutely required; and in cases of sleeplessness would give twice as much. In a case with strong erotic symptoms he had attended with Dr. Gull, twenty grains repeated three times a day had been very successful. In the treatment, however, of hysterical mania and of epilepsy, he thought the Bromides, in proper doses, were the most useful. He had seen no danger attending their exhibitions, but the continuance of their use was apt to produce an eruption upon the skin, and particularly upon the face of the patient, a symptom which he did not remember to have seen noticed. Mr. Kesteven's paper had dealt with the subject in a very practical manner, and Dr. Tuke quite concurred with his views as to the value of the Bromides.

Dr. LINDSAY could not agree with Dr. Maudsley as to the dose of the Bromides. Ten grains in his hands were inefficacious, and from twenty to forty grains were required. He had found great benefit from the mixture of hyoscyamus with the drug.

Dr. MAUDSLEY explained that it was not improbable that in hospital practice, smaller doses were sufficient than were found to be necessary in asylums; he still thought that the dose of the Bromides had been uselessly increased,

Dr. SANKEY asked whether Dr. Lindsay had found the Bromides useful in chronic cases of epileptic mania.

Dr. LINDSAY had not tried their effect in chronic cases.

Mr. KESTEVEN said he felt obliged by the attention with which his paper had been received, and the general concurrence in his views expressed by the members. In answer to Dr. Maudsley, he had himself never seen any bad result follow the use of the Bromides, and in the one case instanced by Dr. Maudsley, there seemed to be no ground for ascribing the patient's death to its use. He had had but small opportunity of arriving at any opinion as to the effects of the Bromides upon the sexual feeling; he saw the good result, but it was a question in the case of ladies difficult to ask. With regard to Dr. Ogle's remarks, he would say that he had found the Bromides useful in congestion of the kidneys, and he believed uroëmia to be a very frequent cause of epilepsy.

MR. LEY, OF LITTLEMORE.

MR. WILLIAM LEY,* who had only lately retired from the office of Medical Superintendent of the Asylum for Oxfordshire and Berkshire, was born in 1806, and at the time of his death had not completed his sixty-third year.

He was the son of a clergyman in Devonshire, and received his early education at the Grammar School at Ottery St. Mary. He was apprenticed to Messrs. Lawrence and Warner, of Cirencester, practitioners of good reputation and experience; and completed his professional education at St. Bartholomew's Hospital, where he was a dresser under Mr. Earle. He was admitted a Member of the College of Surgeons in 1831, and a Licentiate of the Society of Apothecaries in 1835.

The first public appointment he held was that of Resident Medical Officer of

* See also Obituary Notice. *Journal of Mental Science, April, 1869.*

the Fever Hospital. After holding it about four years, he began practise in Crawford Street, and about the same time he was elected Surgeon to the Western General Dispensary,—an office which gave him much work among the poor. His colleagues remember that he did the work with ability, with good feeling, and with the most conscientious uprightness of purpose. In his own opinion, however, he was more fitted by his tastes for the duties of a Physician than for the more strictly surgical part of the profession.

After some few years,—at the instance of Sir William Lawrence and other private friends—he determined to quit the general practise of medicine, and to enter on the special department of lunacy, which was then receiving attention from active members of the profession. With this view he took lodgings at Hanwell, for the purpose of studying the diseases and general management of the insane. Ample opportunity was afforded at the asylum under the personal superintendence and instruction of Dr. Conolly and Dr. Begley. Mr. Ley's minute knowledge of morbid anatomy, and ability to detect shades of difference in diseased structure, at once gained him the respect of all who met him at the examinations in the dead-house.

When the asylum for the united counties of Oxford and Berks was instituted in 1845, he was appointed to the office of Medical Superintendent then created. To form such an establishment, and to bring the different officers—all alike new to their duties—to work together in harmony, to maintain the requisite discipline, and to enforce it by example, was a task which he executed with remarkable skill; he gained the affection of those under him, while he commanded their respect. He was seldom absent from the Asylum; indeed he denied himself the moderate relaxation which others in similar office find necessary as a relief from the monotony of the work.

The view he took of madness, as it came under treatment, was that diseases of the mind, as shown in the insane, were generally dependent on constitutional causes. He pointed to the pathological evidence that they were most frequently found in connection with diseases of the chest or the respiratory system. It was a special feature of his system of management that the patients were invariably treated with gentleness. On one occasion an officer from another asylum applied to the head nurse to lend a "strait waistcoat." The nurse not being able to understand the name or the nature of what was wanted, came to Mr. Ley and reported the request. There was no such thing at Littlemore.

Mr. Ley sought consistently to carry the humane system far beyond what was common—beyond what other people could understand. In the task he set himself to accomplish, he felt that he had to take all the duty upon his own back—or too much of it. It need not excite wonder that his health broke down. "*It took more out of a man,*" he said, shortly before his death, "*than any man is justified in giving.*"

Beyond his Annual Reports, which were regularly printed by the Committee of Visitors, he was not the author of any printed work, except a single pamphlet—"An Address to the Governors of the Warneford Asylum, upon the Distribution of the Warneford Gifts," and a paper in one of the Medical Journals upon *Cannabis Indica*, which he was the first to bring to the notice of practitioners in England. He was one of the early members of the Association of Medical Officers of Asylums, and served the offices of President and Treasurer. For some years he took an active part in the affairs of the Society, without, however contributing to the Journal.

At different times of late years Mr. Ley had shown symptoms of hypertrophy of the heart; and, without admitting to himself the extent or the full consequence of the lesion, he felt the need of being released from the charge upon him. Conscious of failing health, and doubtful of his power to continue the duty to his satisfaction, he more than once requested to be allowed to resign his office. At the urgent desire of the Committee of Visitors he consented to remain. Frequent and lengthening periods of illness, without perfect recovery in the intervals, made retirement necessary.

The Committee acknowledge in most complimentary terms his just and honourable discharge of duty through more than twenty years. "Twenty years," said one of the Committee, "and there has never been a scandal." As a further acknowledgment of the services he had rendered, the Committee awarded him a pension, which was confirmed unanimously by the Quarter Sessions of both counties, and the boroughs in union.

When he was finally released from the labors under which his once strong health had given way, he spent some months in Devonshire, looking forward to a home among the scenes of his early life. He had lately returned to the neighbourhood of Oxford, and was upon a visit to former friends at Littlemore—purposing after a short stay to pass on again to Devonshire, to try whether the warmer climate would be more suitable to his increased difficulty of breathing. His strength failed too rapidly to allow of his removal from Littlemore, and there,—under the watchful care of those who had been trained under his own eye,—he quietly breathed his last.—*Medical Times and Gazette.*

ALLEGED INCREASE OF LUNACY.

WE often hear people assuming that lunacy is more common than it used to be, and speculating upon the causes of the supposed increase. Sometimes it is ascribed to education, sometimes to religion, and more frequently to the railways or the telegraph. The conception of proper treatment for lunatics is modern, and provision for giving practical effect to it belongs to the present century; and perhaps Providence has ordained that the number of subjects for treatment should increase in order to prevent so much good philanthropy from being wasted. It is probably correct to say that the middle and upper classes of Englishmen are more temperate than they were a century ago, and it would be disappointing to conclude that those who used only to get drunk now go mad. We are told that politics and statesmanship do not produce many lunatics, neither does law, literature, nor the fine arts. We know that clergymen sometimes make their hearers mad, but we do not know that they go mad themselves. The army and navy send few patients to asylums; and, on the whole, it is concluded that intense devotion to business is the chief cause of madness. The speed at which we live is said to be too high, and if a man comes up to business by express train in the morning, receives and answers telegrams all day, and returns home by express train in the evening, it is supposed that his brain must be in a process of deterioration. Another conjecture is that people have too much pleasure or too much variety in life, and that the best preservative of a sound mind was the dulness of a country town of the last century.

That statement that lunacy is increasing would be highly important if true, but we have some reason to think it is not true. It is matter of common knowledge that lunatics have been very much looked up during the last twenty or thirty years, and it may be that the supposed increase in their numbers is merely the result of greater accuracy in registration. A considerable degree of accuracy has now been attained, and inaccuracy, even if it exists, does not affect the present question, because the belief in the supposed increase of lunacy, unless it is mere vague conjecture, must be founded upon such statistics as can be procured; and these statistics, as we shall proceed to show, do not support this belief, but disprove it. In short, it is a popular delusion to suppose that the spread of intelligence and progress in the arts of life renders this generation more liable than its predecessors to brain disease. This subject was discussed at a recent meeting of the Medico-Psychological Association, and a paper read before that meeting by Dr. C. Lockhart Robertson exhibited the results of examination of the returns, upon which alone a trustworthy opinion can be formed. This paper admitted that a general belief in the increase of lunacy existed, and had some apparent justification. The grand total of the insane of all classes, detained in asylums, in workhouses, and in private dwellings was, in 1844, 20,611, and, in 1868, 50,118. Thus in twenty-five years the number of registered lunatics has

more than doubled. And if we compare the number of lunatics with the total population of the country, we shall find that in 1844 the ratio was 1 in 802, while in 1868 it was 1 in 432. The statistics of France exhibit a similar result. The total number of the insane in that country increased, from 1 in 796 in 1851, to 1 in 444 in 1861. It is remarkable that the proportion of registered lunatics to population in England and France should be almost exactly the same, being in the former country 1 in 432, and in the latter 1 in 444. In explanation of the apparent increase of lunacy in England, it is to be observed that, previously to 1844, no statistical record existed of the number of insane in England. The returns made in that year were considered by the Commissioners in Lunacy "plainly insufficient for general deductions." Again, the returns for 1847 were stated by the Commissioners to be "notoriously imperfect, falling far short of the actual amount." As regards pauper lunatics, there was until recently no official system of registration. County asylums have only been established since 1845, and the greater care bestowed on the insane poor since that time has produced a more accurate knowledge of their numbers, as well as of their condition. But as regards private patients in asylums belonging to the middle and upper classes an accurate registration has been enforced for a longer time, and the number of these patients in proportion to population has not increased. In 1858 the number was 4,612, and the proportion was 1 in 4,164; in 1868 the number was 5,244, and the proportion was 1 in 4,065. These figures ought to make an end of all theories which ascribe the supposed increase of mental disease to particular habits or tendencies of our age. It cannot be education, nor business, nor polities, nor awakening sermons, nor express trains, nor telegrams, because the classes of society which enjoy or suffer these things do not, in fact, go mad more frequently than they used to do. The increase of lunacy has taken place, if it has taken place at all, among the poorer classes, who live now nearly as they lived a hundred years ago. But the increase among these classes has been apparent and not real. If Mr. Gladstone's Irish Church Bill passes as he has brought it in, there is likely to be an apparent increase in the number of pauper lunatics in Ireland, but we do not suppose there will be a real increase. And the apparent increase of pauper lunatics in England is an increase in a decreasing ratio. Thus, in the period 1844-9 the increase in the number of inmates of asylums in England—which increase, as we have seen, belonged to the pauper element—was in the ratio of 5.64 per cent. But in the period of 1864-8 the ratio of increase was 3.82 per cent. In France also the increase in the number of inmates of asylums has been on a comparison of the same periods, in nearly the same decreasing ratio. Thus, as Dr. Robertson says, "if mental disease be on the increase, it is at least satisfactory to find that that the annual increase, both in England and in France, is in a decreasing ratio." A similar conclusion may be obtained by examining the numbers of admissions to asylums both in England and France. The result of the French returns is clearly stated by an official writer, quoted by Dr. Robertson:—

Ainsi la proportion d'accroissement, après s'être élevée à 7,94 p. 100 vers 1838, date de la loi relative au traitement des aliénés indigents, est successivement descendue à 3,83 et à 2 p. 100. On trouve dans cette diminution graduelle la preuve bien manifeste que l'accroissement si considérable des admissions est un fait tout à fait temporaire, et qui tient, en grande partie, à l'action bienfaisante de la loi précédente. Pour satisfaire aux prescriptions de cette loi, qui a obligé chaque département à faire traiter ses aliénés indigents, les asiles ont été agrandis, multipliés, améliorés, et le nombre des admis s'y est naturellement accru.

The number of admissions to English asylums was largely affected by the passing of the Act of Parliament of 1861, rendering pauper lunatics chargeable upon the common fund of the union, instead of upon their parishes. The fear of burdening the parish rates now ceased to influence the action of parochial authorities, and accordingly we find that in the years 1863-5 there was an increase of nearly 10 per cent. in the admissions to asylums. But in late years the rate of increase has been considerably reduced. It must be remembered, too, that this increase of admission is a mere transfer from workhouses and private dwellings

to asylums. The management of pauper lunatic asylums is most creditable to the humanity and scientific skill of their medical superintendents, and the experience gained in them has contributed to the amelioration of the treatment of the insane of the upper and middle classes. These satisfactory results cannot of course be obtained without paying for them, and the cry which is going up for a diminution of the burden of county rates may possibly produce some interference with the views enlightened philanthropy entertains as to the proper mode of treating pauper lunatics. It seems probable that financial boards will be constituted in counties, and that ratepayers will have a choice in deciding questions which have hitherto been settled by a committee of magistrates. We doubt whether the representative vestryman is likely to act in harmony with the medical superintendent of a pauper lunatic asylum. It is a mistake to assume that expenditure upon these asylums is not true economy; but it is a mistake which uninstructed mind are very likely to fall into. But whatever conflicts may be in store for medical officers of lunatic asylums in England, we foresee that in Ireland, under Mr. Gladstone's Bill, they will find a paradise. They are to be invited to help to spend the surplus property of the disendowed Church, and we venture to believe that they will be found equal to the occasion. The pauper lunatic asylums of Ireland are likely to become models of complete arrangement and scientific management, and although we do not suppose that people will pretend madness to gain admission to them, we do suppose that pauperism will be assumed in order to obtain gratuitous maintenance and medical treatment for persons who ought to pay for it. In any asylum in England now the condition of a pauper lunatic is incomparably preferable to that of the most wealthy lunatics in any asylum of the last century. Indeed, the most wealthy lunatics were frequently the worst treated. Perhaps lunatics and idiots who remained in their own homes were treated better than those who were placed in asylums. The feelings of humanity would assert themselves in uninstructed bosoms, and it was only a pretended science that applied systematic cruelty to that portion of mankind which most deserved the pity of its fellows. There has been no more remarkable change of ideas than that which has almost banished from lunatic asylums the whole apparatus of restraint. It would be melancholy to think that, along with so great improvement in the treatment of mental disease, there is a tendency in advancing civilisation to multiply the subjects of it. But Dr. Robertson has shown that this opinion, although not destitute of apparent foundation, is erroneous.—*The Saturday Review.*

OPENING OF A NEW CHAPEL AT THE LINCOLNSHIRE COUNTY ASYLUM.

A MOST interesting ceremony took place at the County Lunatic Asylum, at Bracebridge, on Tuesday last. In consequence of the additions which have been made to the Asylum, the original chapel became too small for the requirements of the inmates, and the Committee of Visitors were accordingly authorised to erect a detached chapel, capable of accommodating a congregation of 450, and to convert the old building into a recreation-hall, the cost altogether not to exceed £2,000. The new chapel is 70ft. 9in. by 45ft. There are separate entrances for the sexes, through porches 7ft. 6in. by 7ft., between which are two retiring-rooms for epileptics, 10ft. by 7ft. 4in. The roof is high pitched, all the timbers being exposed to view, and plastered between the rafters. At the east end is a raised dais for Communion purposes, enclosed by a suitable railing, and floored with encaustic tiles. A robing-closet is formed behind the pulpit, and a similar enclosure in the opposite corner forms an inside porch to the chaplain's entrance. The sittings, robing room, and retiring rooms are floored with wood, the remainder with blue and red Staffordshire tiles. All the fittings from the old chapel were again used. The windows are glazed with cathedral glass, in lead lights. The woodwork exposed to view is stained and varnished. The stone for the walls and for lime were obtained upon the estate. The west gable is sur-

mounted by a small bellcote. The original chapel has been altered, so as to fit it for a recreation-hall. It is 45ft. by 37ft., with a raised stage 14ft. by 6ft., and a gallery 36ft by 7ft. Both the new chapel and the recreation hall are warmed by Gurney's stoves. The plans were prepared by the Surveyor to the Visitors (Mr. Young), according to instructions from Dr. Palmer, and the total cost has not exceeded the means placed at the disposal of the committee. The contract has been carried out in a very creditable manner by Messrs. E. Otter and Binns, of Lincoln, under the superintendence of Mr. William Young, as clerk of works.

At eleven o'clock divine service was held in the new chapel, the congregation comprising a large number of the visiting justices and their families, the workmen employed at the Asylum, and about 300 of the patients, who conducted themselves in a most orderly and attentive manner. The prayers were read by the chaplain (the Rev. C. C. Ellison), the 1st Lesson by the Rev. Prebendary Perry, and the second Lesson by the Rev. J. Swift. The Communion Service was read by the Lord Bishop of Lincoln : the Chaplain read the Epistle, and the Bishop the Gospel. The Bishop then preached an excellent sermon from the 27th verse of the 14th chapter of St. John—" Peace I leave with you, my peace I give unto you : not as the world giveth, give I unto you." The offertory in aid of the poor of the parish, amounted to £6 12s. 1d. The Holy Communion was afterwards administered to 77 communicants.

At two o'clock, Dr. and Mrs. Palmer entertained a large party of friends at luncheon in the recreation-hall, which was tastefully decorated with flowers for the occasion. The guests included the Bishop of Lincoln, Mrs. and Miss Wordsworth, Ven. Archdeacon Trollope, Miss Mackenzie, the Mayor of Lincoln, Lieut.-Col. Ellison, Messrs. G. K. Jarvis, J. Bromhead, W. Parker, (Hanthorpe), J. Paradise, R. Hall W. Beard, and W. G. Glasier, Mr. and Mrs. Tweed, the Rev. Prebendary and Mrs. Perry, Revs. G. T. Harvey, E. M. Barrett, P. Curtois, and J. J. Swift, the Misses Dudding, Mrs. Mulhall, Rev. C. C. and Mrs. Ellison, &c.—*Lincolnshire Chronicle, May 21.*

GLIMPSES OF ASYLUM LIFE. BY HENRY HAWKINS, M.A.

Facing a beautiful range of the South Downs stands one of our large county asylums. Its southern aspect is surpassingly rich and varied. In the immediate foreground are the trim Italian terraces and gardens partly private, partly appropriated as exercise grounds for the inmates of the establishment.

And what a lovely landscape is spread before their eyes as they sit or walk in the well-kept grounds! The view would be worthy of a royal palace. Beyond the nearer precincts of the building is the well-wooded, park-like farm. A quaint old farmhouse, with the date 1666 on its southern wall, is partly seen at a short distance in a hollow. In the fields and gardens, patients, with their attendants, are at work.

Here and there the spire or tower of a country church adds beauty to the scenery. Now and then the line of white vapour shows the course of the distant train. Further off are the softly undulating South-down hills, presenting endless varieties of beauty. They delight the eye under almost every change of season and of weather, sometimes appearing nearer to the eye—ominous, then, of bad weather—sometimes more remote ; sometimes standing clear and bright in the sunshine, or overshadowed by the passing cloud, or partly shrouded by mist, or at times in winter capped or covered with snow.

Surely the charm and loveliness of the surrounding scenery must, in many instances, imperceptibly soothe and tranquillise the afflicted mind, and contribute, more even than direct remedies, towards restoring its peace and healthful balance. The very air which "nimbly and sweetly recommends itself unto the gentle senses" can hardly fail to prove health-restoring.

A glimpse at some features of asylum life may interest some readers. At an early hour the household is astir. The "toilette" of all the patients is carefully superintended. Cleanliness and neatness are scrupulously enforced, but grotesque or whimsical arrangements of dress (in which some patients, if left to themselves, would be apt to indulge) are discouraged. It is said to be a wise maxim in the management of the insane, to treat them, as far as practicable, as if they were of sound mind. At the breakfast hour the male and female patients assemble in two handsome halls, not unlike college halls, without the high table and the grave portraits of founders and benefactors. Here they take their various meals, seated, in batches, at what may be termed mess-tables. Each patient takes his or her own place. An attendant says grace; various attendants watchfully provide for the wants of those under their respective charge. There is no confusion or disorder—the greatest method and regularity prevail. The chapel service follows breakfast. The ringing of a clear-toned bell summons the worshippers. They cross the small space between the main building and the chapel, and take their places in the holy building. It possesses great beauty. The campanile is a conspicuous object. Internally, the arches of the aisles are sustained on slender graceful double shafts (wreathed or otherwise decorated at Christmas-tide). The light, coming through opaque glass, is subdued. The open seats are kept beautifully clean and polished. The gas standards are of costly workmanship, and the prayer-desk, which also serves as a pulpit, is a handsome structure of carved stone and marble. Not many years has the sacred building been in use yet already it contains memorials of the departed who in life were worshippers within its walls, and now, we trust, await the resurrection of the just. A brass mural tablet, with simple inscription, commemorates a brother; a handsome brass lectern, a sister, "fallen asleep in Jesus." The sanctuary, though small, is reverently ordered, and on certain occasions the holy table is bright with fresh flowers. The daily morning service consists of a selection from the Church's Order for Morning Prayer, or of the Litany. Many voices devoutly and audibly join in the responses. On Sundays greater numbers attend; and at the monthly celebration of the Holy Communion there is a small but reverent band of communicants.

The week-day service over, the regular duties of the day fairly begin. First comes the medical inspection. Besides the general oversight, any case requiring special treatment is brought under the experienced eye of the physician. The working parties are then "told" off to their various scenes of labour. The greater number of men capable of work are occupied on the farm or in the gardens. The shops of the carpenter, tailor, shoemaker, hat and basket maker, &c., receive their respective contingents. Some of the shops have surplus stock for sale—door-mats, cocoa-nut matting, plain and fancy baskets, &c. Of the female patients many remain in the wards at needlework. These wards with their dainty white curtains, flowers, birds, handsome prints, and furniture, are models of taste and neatness. Indeed after the coarse and rough treatment of the insane in past years, a reaction has set in, with a tendency, perhaps, towards over-indulgence and ultra-refinement in their management. Other female patients find employment in the laundry, kitchen, needle-room, &c. Many alas! merely vegetate day after day in vacancy of mind!

At mid-day the large dining-halls are again filled. Then work is resumed. So in asylum life, as in the outer world, man goeth forth to his work and to his labour until the evening. Supper is served in the halls, brilliant with gaslight, in the winter months. At an early hour the patients retire to rest, watched, and, if need be, ministered to, even during the silent hours of the night.

The daily routine is relieved by indulgences of various kinds. The weekly visiting day of the friends of patients is by many anxiously looked forward to. In the forenoon of that day may be noticed country folk or town people, singly or in small parties wending their way to the asylum. They seldom go empty-handed. A basket or paper bag, containing some gift for their friend, is a usual

accompaniment of visitors. The interviews take place in a large room in which the smock frock and the homely dress of country people, and the holiday coat and smart dress of the visitors from the towns, may be seen as the various parties sit or stand in groups conversing with parent or child, husband or wife, brother, sister, or friend, as the case may be. At a fixed hour the room is cleared, the visitors depart, the patients return to their quarters. During the greater portion of the year classes are held for the improvement in writing and reading of a few selected patients. The more advanced scholars transcribe pieces of prose or poetry. A portion of the allotted time is devoted to reading aloud from some book or interesting serial.

During the winter months frequent dances, known as "balls," take place. These are a source of great amusement to many of the patients. Numbers look on as spectators only. The mechanical manner in which some of the dancers take part in the evening's recreations is noticeable. They are interested, but it seems in the way of business rather than of pleasure.

On special occasions the entertainment is of a more festive character. The hall is decorated with flowers or evergreens; refreshments are handed round, and the amusements are kept up a little longer. Sometimes a concert, with characters in costume, is given, or a "reading" from popular writers. Even more interesting, perhaps, are the occasional missionary meetings. Many pleasing reminiscences are cherished by the writer of such gatherings in past years. The honoured names of Wolff, Tozer, Mountain, Higgins of Cuddapah, writer of the "Delhi Mission," rise to remembrance. Not a few have been the acts of self-denial made in the cause of missions by the patients and others of the asylum.

In the summer out-door amusements, of course, prevail. On the lawns the sharp tap of the inevitable croquet mallet is to be heard in the fine evenings. On leisure afternoons a cricket match is often played. Sometimes a tea-party for the female patients is held *al fresco* on some suitable spot on the beautiful grounds; or a long country ramble beyond the boundaries is enjoyed by selected patients, who may be seen returning with handfuls of spring or summer flowers.

But the best appreciated out door treat consists in the picnic held now and then during the summer months. It is a long day's pleasure.

Beyond the bounding hill to stray,
And break the live-long summer day
With banquet—

not "in the distant woods," which would afford opportunity of escape, but on a wide stretching common, which inspires something of the sense of freedom and of liberty. Soon after chapel, the commissariat cart is brought round and loaded with ample provisions for the day's campaign. Not trifling is the consumption of bread, cheese, meat, and beer, by that monster picnic party, with appetites sharpened by exercise and by bracing country air, partaking of qualities of the "sea board and the down."

Sometimes preceded by a brass band, the patients, in two detachments, start betimes for their *fête champêtre*,—by orchards, corn-fields, heaths, on to an extended moor, admirably suited for such a gathering. Arrived at their destination, the holiday-makers give themselves up to the *abandon* of the day. Wickets are pitched; the football is kicked about: a dance is got up, or "kiss-in-the-ring" is voted for. Presently a very substantial dinner is served. Then amusements are resumed. Many of the women prefer to pass the day seated on the grass, some in vacancy of mind, others, poor things, thinking about home and dear ones there; others with thoughts disordered, "like sweet bells jangled" out of tune.

Towards early evening a camp-fire is lighted, gipsy fashion, and tea prepared; at length, with the lengthening shadows, the whole party, a little wearied, but all the better for the day's excursion, return to the asylum. Thus, in healthful work, relieved by occasional but not too frequent recreation, asylum life passes away. Many, by the blessing of God on the remedies adopted, become, after a

longer or shorter course of treatment, convalescent, and return to the outer world. The restoration of some proves permanent. Their faces are seen no more in the wards. Others suffer relapse, and return as patients. Many old and feeble, or chronic cases, remain, carefully tended and watched over, till their appointed hour comes, and their bodies, if not claimed by their friends, are laid to rest in the beautiful cemetery until the morning of the Resurrection.—*The Churchman's Magazine*

CORRESPONDENCE.

THE EDUCATION, POSITION, AND PAY OF ASSISTANT MEDICAL OFFICERS IN PUBLIC ASYLUMS.

To the Editors of the Journal of Mental Science.

GENTLEMEN,

I observe in the April number of the Journal a letter from one signing himself "An Assistant Medical Officer to a County Asylum, &c.," advocating changes in, amongst other things, the position of assistant medical officers. I quite agree with him in thinking that a preliminary training for the post is necessary, and in thinking that the clinical clerk system is as good as any other, at least until the study of Psychology is insisted on by the examining boards. But when he goes on to say that the senior assistant or the sole assistant should be dubbed Assistant Superintendent, I do not accompany him. He objects to the term "Assistant Medical Officer" because he says it does not include the assistance rendered in the administration department. In like manner I might object to his term which does not include the assistance rendered in the medical department.

But it is not on these grounds that I am writing. To alter the present rank and pay of assistant medical officers would be, I think, to take away much of the good which their position at present affords. No assistant ought, in my opinion, to get more than £150 a year, with board, &c. I get £100, and think myself, with every necessary of life found me, except my clothes, quite as well off as a superintendent with £250. To raise the pay of assistants in asylums to £200 a year and more would, in eyes of men of more experience than the "Assistant Medical Officer, &c.," be a great mistake. Not the smallest evil which it would breed would be to introduce a class of men who would remain all their lives assistants; men of no ambition, who would perform their duties perhaps conscientiously, but with spirits enervated by the routine of twenty years or so in a subordinate position, which the spur of responsibility never goads. As to the position of the assistant medical officer, no rules, however sharply defined, can alter it from what the medical superintendent has privately determined it shall be, and consequently his position really depends entirely on himself. If he wins the confidence of his superior officer he will have as much responsibility and authority as any young man can wish for, and in some cases a great deal more.

I have the honour to be,

Gentlemen,

Your obedient servant

AN ASSISTANT PHYSICIAN.

Guy's Hospital. Clinique on Mental Diseases.—Dr. Thompson Dickson has been appointed *interim Lecturer* on Mental Diseases at Guy's Hospital. The pupils will have the advantage of attending the practice of St. Luke's Hospital, of which Dr. Dickson has recently been elected resident medical superintendent.

Town's Hospital, Glasgow. Clinique on Mental Diseases.—A course of clinical instruction in mental disease will be given during the Summer Session, by Dr. Alexander Robertson, in the City Parochial Asylum. We understand that the accommodation for the insane in this Institution has lately been extended, so that now upwards of two hundred patients can be received. As all forms of insanity are under treatment, students have here a valuable field for observation open to them, in a department which has hitherto been too much cut off from the ordinary branches of medical study. Dr. Alexander Robertson has shown by his published papers on aphasia and other cerebral diseases, that he has made use of his opportunities for minute and accurate observation on the pathology of Insanity, while his "Notes of a Visit to American Asylums," in the April Number of the *Journal of Mental Science*, bears evidence of his familiarity with its general management, and the internal economy of institutions intended for its treatment.—*The Glasgow Medical Journal, May, 1869.*

Appointments.

THE MORISON LECTURES, ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

The President of the Royal College of Physicians has appointed DR. ARTHUR MITCHELL, Deputy Commissioner in Lunacy, to deliver the six annual lectures on mental diseases for the next three years.

ADAM, C., M.B., C.M., has been appointed Medical Officer to the District Lunatic Asylum for the County Elgin.

ALLAN, C. J., M.B., C.M., has been appointed Visiting Physician of the Gilmour House Lunatic Asylum, Liberton, Edinburgh.

DEAS, P. MAURY, M.D. Edin., Senior Assistant Physician to the Royal Edinburgh Asylum, has been appointed Medical Superintendent of the New Cheshire County Lunatic Asylum. The *Scotsman* says Dr. Deas is the fourteenth assistant who has left this Asylum to become medical superintendent of other asylums in England and Scotland.

DICKSON, J. THOMPSON, M.A.M.B. Cantab., has been appointed Medical Superintendent of St. Luke's Hospital for Lunatics.

GILL, H. C., M.R.C.S.E., L.S.A., Resident Clinical Assistant at the Bethlem Royal Hospital, has been appointed Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum.

KING, T. R., M.D. Edin., has been appointed Junior Assistant Physician to the Royal Edinburgh Asylum for the Insane.

MORRISON, W. F., L.R.C.P. Ed. has been appointed Assistant Medical Superintendent of the Fife and Kinross District Asylum, Cupar.

Books, Pamphlets, &c., received for Review, 1869.

(Continued from *Journal of Mental Science, April, 1869,*)

A History of European Morals from Augustus to Charlemagne. By W. E. H. Lecky, M.A. 2 Vols. 8vo. This work will be fully reviewed in the next number (October) of this Journal.

Eleventh Annual Report of the General Board of Commissioners in Lunacy for Scotland. Presented to both Houses of Parliament by command of Her Majesty. Edinburgh: Printed for Her Majesty's Stationery Office, by Thomas Constable. 1869.

- On Counter-Irritation. A Theory constructed by the Deductive Method of Investigation. By James Ross, M.D. Newchurch, near Manchester. John Churchill and Sons, New Burlington Street. (*Pamphlet.*)
- Diaphoresis : a Powerful Aid in the Arrest and Removal of Human Disease, and thereby prolonging Life. By Charles Clarke, M.A. Cantab., M.R.C.S. John Churchill and Sons, New Burlington Street. (*Pamphlet.*)
- Observations D'Hystéro Epilepsie Chez l'Homme Précedées d'une étude sur le Diagnostic Différentiel des Convulsions Hystériques Epileptiques et Hystéro-Epileptiques. Par M. le Dr. Ach. Foville fils, Médecin adjoint de la Maison Impériale de Charenton. Mémoire lu à la Société de Médecine de Paris, le 20 decembre 1867. Extrait du Recueil des travaux de la Société, t. iv. (*Pamphlet.*)
- Du Delirium Tremens de la dipsomanie et de l'Alcoolisme Notice Historique et Bibliographique par le Dr. Foville fils. Extrait des Archives générales de Médecine, numéro d'octobre 1867. (*Pamphlet.*)
- Annual Address before the Medical Society of the State of New York, February 5th, 1868. By John P. Gray, M.D., President of the Society, and Medical Superintendent of the New York State Asylum, Utica. (*Pamphlet.*)
- A Case of Aphasia. By H. Grainger Stewart, M.D. Communicated to the Northumberland and Durham Medical Society. Newcastle-upon-Tyne : Printed by M. & M. W. Lambert, Grey Street, 1869. (*Pamphlet.*)
- On the Identity of the Vital and Cosmical Principle, by Robert Lewins, M.D., Staff Surgeon-Major to Her Majesty's Forces. Lewes : George P. Bacon, Steam Printing Offices. 1869. (*Pamphlet.*) See Part II, *Reviews.*
- Perspiration by the Turkish Bath, as removing Disease : with a Preface and Appendix, by Charles Bryce, M.D., F.R.P. & S., Author of Sketch of the State of Medicine in Turkey, Memoir on the Intermittent Fever of the Levant, England and France before Sebastopol, &c. Second Edition. Brighton : H. and C. Treacher. 1869. (*Pamphlet.*)
- Bericht über die Heilanstalt für Nervenkranke bei Blankenburg am Harz. Von Dr. Otto Müller, dirigirendem Arzte. Braunschweig, Druck und Papier von Friedrich Vieweg und Sohn. 1869. (*Pamphlet.*)
- More Light : a Dream in Science. London : Wyman and Sons, 74-75, Great Queen Street, Lincoln's-Inn Fields, W.C. 1860. (*Pamphlet.*)
- Bathing : How to do it, When to do it, and Where to do it. By Edgar Sheppard, M.D., Member of the Royal College of Physicians, Fellow of the Royal College of Surgeons, Medical Superintendent of the Male Department of Colney Hatch Lunatic Asylum. Third Edition. London : Robert Hardwicke, 192, Piccadilly. 1869. (*Pamphlet.*)

Obituary.

DR. WILLIAM SELLER.

Edinburgh has lost one of her most esteemed citizens, and the profession one of its most accomplished members, by the death of Dr. William Seller. The deceased gentleman graduated at the University of that city in 1821, and for several years acted as medical tutor in preparing undergraduates for their preliminary and final examinations. Those were the days when the thesis, or medical dissertation, with which each graduate was required to inaugurate his assumption of the Doctor's gown, was written and defended in the Roman tongue ; and Dr. Seller's accurate and elegant scholarship was often laid under contribution by candidates whose Latin was (in Charles Lever's phrase) "on the peace establishment." Few men possessed a deeper or finer knowledge of the Greek and Latin medical writers, or could clothe with a more classic grace the ideas of modern medicine in the language of Celsus.

In 1836, Dr. Seller became a Fellow of the Royal College of Physicians of Edinburgh ; and continued to diversify the labours of his increasing medical

practice by researches in sciences cognate to those of his profession, and in the phenomena of lunacy particularly. His papers on that subject, and the able and original part he played on all occasions at the Royal Society and elsewhere when it formed the theme of discussion, will long be remembered and referred to. He was unusually accomplished in the *Materia Medica*, even in its applications to veterinary science; and his work written in conjunction with Mr. Henry Stephens, and entitled "The Physiology of the Farm," is esteemed as the standard treatise on the subject. But it was as Morison Lecturer, and as an independent and able inquirer in the obscure domain of mental disorders, that he did most signal service; while his career as that of an upright, honourable, and public-spirited citizen will enhance on general grounds the regret with which, as an ornament to the profession, the loss of him is deplored. Dr. Seller was an honorary member of the Medico-Psychological Association.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION; ANNUAL MEETING.

President, THOMAS LAYCOCK, M.D., F.R.C.P. Edin., Professor of the Practice of Medicine in the University of Edinburgh.

The Annual General Meeting of the Medico-Psychological Association will be held in York, on Monday, the 2nd of August.

Circulars, with the details of the Meeting, will be sent to the Members of the Association.

Members of the Profession desirous of admission into the Association are requested to communicate with the Honorary Secretary, to whom notice of communications, &c., &c., for the Meeting are also to be sent.

HARRINGTON TUKE,

Hon. Sec.

37, Albemarle Street, W.
June 25th, 1869.

THE JOURNAL OF MENTAL SCIENCE, OCTOBER, 1869.

[Published by authority of the Medico-Psychological Association.]

CONTENTS.

PART I.—ORIGINAL ARTICLES.



PAGE.

T. Laycock, M.D.—On the Objects and Organization of the Medico-Psychological Association	327
Daniel H. Tuke, M.D., M.R.C.P.—An Apology for Lord Brougham on Psychological grounds	343
Benjamin W. Richardson, M.D., F.R.S.—On Physical Disease from Mental Strain	350
Frederick MacCabe, M.D.—On the alleged increase in Lunacy	363
Frederic Bateman, M.D., M.R.C.P.—On Aphasia or Loss of Speech in Cerebral Disease	367
Mons. Brierre de Boismont.—Reply to the three Questions of the Committee of the English Medico-Psychological Association as to the Reforms to be introduced into the Examination of the Insane in Courts of Justice. Translated by Dr. G. MACKENZIE BACON	393
Henry Maudsley, M.D. Lond.—Emanuel Swedenborg	417
Occasional Notes of the Quarter.—The County Lunatic Asylums under the County Administration Bill, 1869.—The "Pall Mall Gazette" on the Treatment of Criminal Lunatics.—The North British Review on the alleged increase of Lunacy.—Recent Prosecutions by the Commissioners in Lunacy	436—449

PART II.—REVIEWS.

A Memoir of John Conolly, M.D., D.C.L. By Sir James Clark, Bart., K.C.B., M.D., F.R.S., Physician in Ordinary to the Queen	450
Le Ramollissement et la Congestion du Cerveau Principalement considérés chez le Vieillard, par le Dr. J. V. Laborde	456
Gheel, the City of the Simple. By the Author of "Flemish Interior"	458

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

Note by the Editors	461
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PART IV.—PSYCHOLOGICAL NEWS.

Proceedings at the Annual General Meeting of the Medico-Psychological Association, held in the Museum of the Philosophical Society of York, on Monday, August 2nd, 1869, under the presidency of T. LAYCOCK, Esq., M.D.—Correspondence.—Books received.—Appointments.—The Fourth Quarterly Meeting of the Medico-Psychological Association, October, 1869	462—485
List of Members	i

The Journal of Mental Science.

Original Papers, Correspondence, &c., to be sent by book post direct to Dr. ROBERTSON, Hayward's Heath, Sussex.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Haywards Heath, Sussex, or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents:—Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York.

Authors of Original Papers receive three extra copies of the Journal by Book-post. Should they wish for Reprints for private circulation they can have them on application to the Printer of the Journal, Mr. Bacon, Lewes, at a fixed charge of 30s. per sheet per 100 copies, including a coloured wrapper and title-page.

The copies of *The Journal of Mental Science* are regularly sent by Book-post (*pre-paid*) to the ordinary Members of the Association, and to our Home and Foreign Correspondents, and Dr. Robertson will be glad to be informed of any irregularity in their receipt or overcharge in the Postage.

The following *EXCHANGE JOURNALS* have been regularly received since our last publication:—

Annales Médico-Psychologiques; *Zeitschrift für Psychiatrie;* *Vierteljahrsschrift für Psychiatrie in ihren Beziehungen zur Morphologie und Pathologie des Central-Nervensystems, der physiologischen Psychologie, Statistik und gerichtlichen Medicin,* herausgegeben von Professor Dr. Max Leidesdorf und Docent Dr. Theodor Meynert; *Archiv für Psychiatrie und Nervenkrankheiten,* herausgegeben von mit Dr. L. Meyer und Dr. C. Westphal; *Correspondenz Blatt der deutschen Gesellschaft für Psychiatrie;* *Irren Freund;* *Journal de Médecine Mentale;* *Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali;* *Annali Frenopatici Italiani Giornale del R. Manicomio di Aversa e Della Società Frenopatica Italiana Direiti dal dott. Car. B. G. Miraglia;* *Medizinische Jahrbücher* (*Zeitschrift der K. K. Gesellschaft der Aerzte in Wien*); *the Edinburgh Medical Journal;* *the American Journal of Insanity;* *the Quarterly Journal of Psychological Medicine, and Medical Jurisprudence,* edited by William A. Hammond, M.D. (New York); *the British and Foreign Medico-Chirurgical Review;* *the Journal of Anatomy and Physiology,* conducted by G. M. Humphrey, M.D., F.R.S., and Wm. Turner, M.B., F.R.S.E.; *the Dublin Quarterly Journal;* *The Liverpool Medical and Surgical Reports, October, 1868,* edited by F. T. Roberts, M.B., B. Sc., Lond., and Reginald Harrison, F.R.C.S.; *The Lancet;* *Medical Times and Gazette;* *the Medical Mirror;* *the British Medical Journal;* *the Medical Circular;* *The Practitioner, a monthly Journal of Therapeutics,* edited by F. E. Anstie, M.D.; *the Glasgow Medical Journal;* *the Journal of the Society of Arts;* *Scientific Opinion, a monthly record of Scientific Progress at home and abroad.* Also *the Morningside Mirror;* *the York Star;* *Excelsior, or the Murray Royal Institution Literary Gazette.*

Our Review of the "Lunacy Blue Books, 1869," is unavoidably postponed to our next number (January, 1870.)

THE JOURNAL OF MENTAL SCIENCE.

[Published by Authority of the Medico-Psychological Association.]

No. 71. NEW SERIES, No. 35. OCTOBER, 1869. VOL. XV.

PART I.—ORIGINAL ARTICLES.

The Objects and Organization of the Medico-Psychological Association; The Anniversary Address. By T. LAYCOCK, M.D., &c., &c., President of the Association.

(Read at the Annual Meeting of the Medico-Psychological Association, held at York, August 2nd, 1869.)

My first duty is to repeat my most cordial thanks to you for the high honor you have done me in electing me to be your President; my next to proceed at once to the delivery of the address which your successive Presidents are expected to give. I feel reluctant to depart from the order laid down by our Secretary, but perceiving that it is my duty to guide your proceedings, and as the business to be brought before you is two-fold, I will divide my address. This morning I will examine into the organization and objects of the association, since these must come before you, and in the afternoon, if time permit, will make a few remarks on the progress and prospects of Mental Science.

Of the recent Presidential Addresses, that of our late President is the most germane to our present business; I therefore now offer our cordial thanks to Dr. Sankey, not only for his general services, but especially for that painful exposition of the defects in our organization, and of the poor work done in consequence, with which he favoured us last year. I shall follow up the subject, for I know that there is almost universal agreement with him amongst the members. If his views, as some may think, were too moderate, that only renders the short-comings of the association more re-

prehensible; if a wider, and as I think, more accurate view be taken, then it is certain that with no association are the objects more comprehensive, and at the same time the organization and the desired results more defective.

The facts in proof of our defective organization are numerous. I shall not however wander from those which may be found in the agenda of this meeting. You have a President and Council. What are their uses? The first business, marked *a* on the programme, is a resolution which involves the existence of this association. Your Senior Editor is to move, and the Secretary to second it. Mention is also made of a letter upon which the resolution is grounded. You may have concluded that your Presidents and Council had had this letter laid before them, had framed that important resolution, and had entrusted the advocacy of it to the gentlemen I have named. Let me assure you that that conclusion would be erroneous. There has been no meeting of Council for that purpose, nor had your President any knowledge of the resolution before he read it in the agenda. In fact the knowledge was withheld from him, inasmuch as he in vain requested the favour of a proof copy of the agenda before issue. I must presume these officers acted in accordance with your customary procedure; if so, it is obvious neither your President nor your Council have any share in your organization.*

Dr. Sankey remarked last year with much truth, "that the chief functions of this association, so far as he could understand them, by reading its rules and the reports of its meetings, have consisted in publishing a Quarterly Journal." Let us examine what share this takes in your organization. If one of its functions be to facilitate that object of the association which aims at free interchange of opinion amongst the members, the publication of the agenda in the issue of the Journal which immediately precedes the annual meeting would serve this end. Turn to the current number for 1st July, and you will find that although there is a notice of the time and place of this meeting, there is no mention of

* This paragraph was written before the meeting of Council on the 2nd of August. It appears, however, to be a correct conclusion, as at that meeting the General Secretary, in explanation of the fact that no minutes of Council had ever been taken, stated that it was a purely honorary body. So also as to the office of President. The Secretary had received a letter addressed officially to the President, of date June 19th, and written by the Secretary of the Royal Medico-Chirurgical Society, but he had withheld it from the President on the ground that he was a purely honorary officer,—T.L.

this resolution, nor any intimation of the letter upon which it is based, nor of any business whatever to be transacted. This is the more remarkable departure from the usual custom, when we observe that the Senior Editor not only proposes for your adoption a step, which if carried will entail the dissolution of the association, but also invites us virtually to endow him and our Secretary with power to arrange the transfer of your funds and organization to a new society in London, "as they may find best." I do not presume to enquire by what authority the Senior Editor has arranged all this: I only say now, that it is not unreasonable to expect that at least a knowledge of official communications, and of circumstances involving the most vital interests of the association, should be communicated to you through the medium of your Journal.

When endeavouring to ascertain what business would be brought before you, I observed that certain notices of motion given at the last meeting were omitted from the agenda. I shall at once rule that they may, nevertheless, be brought forward; but their omission will, I fear, cause a repetition of the trivial discussions on points of form which have occupied at previous meetings so much of the short time allotted to business. This kind of thing requires remedy, since the result is that the chief objects for which you meet are deferred to another opportunity. These defects in our organization seem to me to explain sufficiently a remark made by Dr. Sankey in his address last year—"There are many questions which have been brought forward at previous meetings, which remain unsettled still. There are recommendations which remain a dead letter; there are many difficulties, scientific, social, or political, which we could by a few discussions help to solve,"—and which, I may add, you fail even to attempt the solution of. I trust this meeting will not separate to-day in the usual effete way, nor without making a clean sweep of the defects which render us so impotent.

It would ill become me, having thus probed and laid bare your infirm state with what, I fear, will be thought by some a reckless and ruthless hand, not to indicate the remedies. Before making the attempt, permit me to plead the necessities of my position as my excuse for this apparently severe judgment. Seeing clearly the injurious state of affairs, and knowing the opinions of many of the members, I had to choose between two distinct courses, viz.—either to speak plainly, and I trust decisively, in your interests and the in-

terests of the science you represent, or to consult my own ease and be silent. For obvious reasons, the former course seemed to me imperative.

The remedies are as manifest as the defects. No association, whatever may be its objects, can work well, if the members be not organized on the principle of division of labour, with unity of direction, so that they shall take their part and feel an interest in the work. Experience shows that standing committees, charged with special duties, are most effective in a body like ours to this end. I recommend this step, therefore, to you. To secure unity, your President should have fuller powers, and to the end that he may have the moral support of the body, should be elected by voting papers, so as to give all the members an opportunity of indicating their preference. He should be *ex-officio* chairman of all committees ; your Council should have its powers defined, and the secretary of each committee should be an *ex-officio* member of Council, together with your other officers.

The number and constitution of the committees will be determined by the nature and numbers of the objects of the association. These are defined in Rule 2, thus—"That the objects of this association be the improvement of asylums and hospitals for the insane ; the acquisition and diffusion of a more extended knowledge of insanity and its treatment ; and the promotion of a free communication on these subjects between the members." The association is therefore restricted, if this rule be literally interpreted, to the pathology and treatment of insanity, and the management of the insane in asylums and hospitals, and consequently mental science in the true sense of the term and its wide applications to the art and science of medicines as medical psychology, are not included amongst your objects. Yet you have deliberately named your body "The Medico-Psychological Association," and you publish a "Journal of Mental Science," so that the cultivation of both mental science and medical psychology is eminently one of your objects.

The origin of this discrepancy between the letter of your rule and the spirit of your organization, is not far to seek. In thus following the order of development of all similar societies, your association has out-grown itself. If you examine the history of the chartered medical colleges, of the various medical societies, and, indeed, of all professional associations whatever, you will find that their objects are threefold, viz.—the maintenance of the secular or social in-

terests of the members, such as are comprised in social position, legal relations, and adequate remuneration; the interchange of professional experience and opinions; and the advancement of the department of art and science practised and cultivated. Your association was first constituted for the attainment of the two first classes of objects by medical officers of asylums exclusively; to them the third has been added lately, and your membership extended. Matters of daily duty are obviously of primary importance; so that information as to all that concerns asylum management and the treatment of the insane must be always useful and interesting to the majority of the members. Would not a standing committee, charged with the duty of collecting and reducing their information to order for a special department of the Journal, be advisable? The early numbers of the Journal prove that the members generally would help such a committee and appreciate its labours.

Another committee might take charge of the defence of your social position and interests. Dr. Conolly marked out a sphere of work for such an one, when in September, 1862, he remarked, "I really believe there is no section of society which labours under more misapprehension and greater disadvantage than our section—the speciality of attending to the interests of the insane. We really may be said to be people who have no friends. The public are entirely ignorant of all our highest duties, and have no appreciation of them at all. The tendency of almost every legislative movement is to confer some new disadvantage upon us, or to throw some insult or affront upon medical men who are engaged in this department of practice."—*Journal of Mental Science*, Vol. viii., p. 455-6.

Dr. Conolly had doubtless in his mind, when he thus addressed you, the serious fact that only a few weeks previously a peer of the realm, high in office at the time, and when exercising the duties of his office as the legal guardian of the insane in his place in Parliament, declared that to consider insanity to be a physical disease, which we all do, was "an evil habit" which ought to be corrected; and who contemptuously designated physicians like Dr. Conolly "mad doctors." It is not surprising that such a high and public example should be followed elsewhere, with the injurious results Dr. Conolly lamented. Dr. Sankey also, in his address of last year, dwelt forcibly upon your isolated and defenceless position; and his predecessor, Dr. Robertson,

reported his active efforts in regard to a bill which seriously affected the pecuniary interests of many members, and which are again involved in the County Administration Bill. The duties of a defence committee would chiefly bear upon injurious opinions and proceedings as manifested in the Press, in Parliament, and in the Courts. Any interference with Boards of Management of Asylums, except as to exceptional cases of hardship and injustice, would be both inexpedient and unnecessary. On looking over numerous annual reports of Asylums, I found ample confirmation of a statement made by a former President, Dr. Wood, who said in 1865, "As a general rule, I think we shall all be prepared gratefully to acknowledge the consideration and support which we receive from the governing bodies to which we belong."

A defence committee would have a wide scope for action in the diffusion of information. Much of the misapprehension to which Dr. Conolly referred has its origin in deeply rooted prejudices. Many persons have as great a fear and dread of the insane as they have of wild beasts, or of dangerous criminals, and they look upon asylums as places of detention, and on the Medical Superintendents as little better than jailers. The horrible treatment of the insane, formerly practised in places of detention, in accordance with these sentiments, is not yet forgotten, and supplies incidents for sensational novels. The defence committee would seize every available opportunity to combat these hurtful and barbarous sentiments. They could clearly show that the insane are unjustly and wickedly treated, when treated as the outcasts of society; that they have a claim on it to solace and sympathy; and that influenced by these moral truths the calumniated mad-doctors have been the chief agents in effecting all the great modern improvements in the treatment of the insane, in the face of the most profound ignorance and the most obstinate prejudices.

A defence committee would not be content, however, merely to combat these prejudices. Your science is rich in substantial benefits to society itself if rightly applied. In aiming at the prevention and cure of insanity, higher and more important objects are attained than are comprised in the effective management of asylums. Statistics carefully drawn up by my friend, Dr. Thurnam, show that of the insane brought under treatment in asylums, within three months of the commencement of the disorder, 80 per cent. or four-fifths are restored to health, even when the most hopeless

cases are included in the calculation ; but if those complicated with fatal diseases like consumption and apoplexy be excluded, then nine-tenths are curable. If, however, the treatment be delayed from three to twelve months, not one-half are curable.

It is obvious from these facts, that early treatment is the greatest economy, but few think of the sad consequences to the individual, when the disease is left to run its course, in the almost complete dissolution of family ties, and the abolition of domestic affections. In too many cases the hopelessly insane are wholly neglected by their relatives, so that their physician takes the place of father, son and brother. It is facts like these which show how criminal, as well as foolish, is the conduct of those who hinder early treatment, by describing mental medicine and the practice of it in hospitals and asylums for the insane as a horrible thing, to be avoided at all hazards. I need not dwell upon the dangers to society and families thus caused, upon the hindrances thus raised to the successful practice of your art and the proper recognition and remuneration of your arduous duties, nor upon the fact that some of the best minds of the profession are thereby repelled from your department of medicine ; all I would urge now is, that a committee, in protecting your social and secular interests, would be effectually serving the interests of humanity and of society.

Mental physicians have frequently to advise families and courts of law in cases of vice and crime, in which mental disorder or defect is pleaded in extenuation of consequences, and in the exercise of these duties have to encounter prejudices of another kind. It is useless to conceal the fact thus indicated, that you are deeply involved in a conflict of new ideas with those old notions, which formerly led and still lead directly to the cruel treatment of the insane. When Cullen, one of the most distinguished of my predecessors in the chair of the practice of medicine, in the University of Edinburgh, recommended stripes as curative means for insanity, while his contemporaries adopted even harsher measures, none were ignorant that it was a bodily disorder ; their methods of treatment were the result of the teachings of the old philosophy. Like contradictory results continue to the present day. That humane treatment of the insane which you all defend and practice follows directly upon contrary principles of ethics deduced from experience. And these bring you into collision with the public, whatever you

do ; whether you restrain the personal freedom of the insane in the interests of society, or plead for a kindly and charitable consideration of them in the interests of justice and mercy, you are held to be equally in the wrong. Add to these ethical and social prejudices, the instinctive dread and abhorrence of a violent lunatic which is felt by most of us, and we can readily understand why a chorus of vituperations of "mad-doctors" arises from the press and the public where a cruel and ferocious murderer, albeit insane, escapes as a lunatic from public vengeance.

The antidote to all this is the reiterated demonstration of the fact that your scientific principles and practice agree in every respect with those of the Christian religion. If you advise that persons with incurably degraded instincts be subjected to a due restraint of their freedom, is it not an act of social justice ? The majority of such persons are the victims of hereditary insanity, and expiate by such restriction that inexorable law, equally natural and divine, by which the sins and follies of the fathers are visited upon the children. If, in the order of Divine Providence, it is your duty to recognise this law, surely it is equally your duty to soften its pains and penalties. Such are some of the arguments by which your conduct might be justified whenever unjustly impugned. You may feel assured that if the public mind were so enlightened as to perceive that a true mental science is in accordance with the fundamental principles of Christian morals, and that when rightly applied, it is available to the solution of some of the most difficult and pressing problems of Christian civilization, much of that misapprehension which Dr. Conolly lamented, and which you all have experienced, would be obviated. But true mental science must be developed and digested before it can be effectually promulgated and applied. Hence it is, therefore, that you have established your *Journal of Mental Science*, and changed your name to one which denotes a scientific body. You have in fact resolved to educate and instruct yourselves, that you may be the better able to instruct the profession and the public at large.

These considerations bring up two other questions, viz.—as to the proper management of the Journal, and as to the class of persons you admit to membership. By your rules you restrict membership to persons interested in the treatment of the insane, and your ordinary members must be also legally qualified practitioners of medicine. In this way you

exclude all those who would join with you in the advancement of applied mental science whether they be practitioners or not. Yet the objects you have really in view not only warrant an extension of the qualification for membership, but conclusively prove that you ought to invite philosophers, legislators, sociologists, educationists, in short all who desire to elevate human nature, to join your ranks. This is a step, in fact, you cannot avoid if you would maintain the scientific position you have taken by a change of name. My friend, Mr. Commissioner Browne, very ably indicated your new position in his presidential address at Edinburgh, in 1866, being the first occasion upon which you assembled under the title of THE MEDICO-PSYCHOLOGICAL ASSOCIATION: "The event," he remarked, "appears to me auspicious both as inaugurating a more correct designation and as pointing to a wider and more legitimate destiny. We can no longer be mistaken for a mere friendly club or a mutual defence society. We may now claim as among our objects the investigation of *all* subjects bearing upon the science of mind in connexion with health and disease. We claim even a wider, almost a universal, range for the science of Medico-Psychology, and we claim for it a distinct position in science. The difficulty is to assign and to restrain it within limits." Briefly, you are the avowed cultivators of an applied mental science. This word "applied" is of importance, because at Edinburgh degrees in mental science are granted, the curriculum for which comprises, in addition to a degree in arts, logic, metaphysics, and moral philosophy with political economy, to the exclusion of mental physiology. These subjects were formerly designated at Oxford "science" simply; now they are more correctly termed "Philosophy," and according to Professor Rolleston, the "Science School" includes the sciences cultivated by Huxley, Helmholtz and Miller. In Edinburgh the curriculum for degrees in Science proper includes the same subjects, but in Germany they constitute the curriculum for degrees in Philosophy. Such is the confusion in academic terms. If we adopt the Baconian maxim that the true and legitimate goal of the sciences is none other than to endow human life with new discoveries and resources, then speculative philosophy must be excluded from mental science in so far as it exclusively deals with man as if he were already a disembodied spirit. Very wisely, therefore, Dr. Bucknill, in his manifesto vindicating the name of the Journal, only included metaphysics in your mental science in

so far as it may be made available to practical uses ; and rightly maintained that that name was appropriate, although you chiefly discussed sociological and medical questions. Dr. Morel, in a communication to the association, indicated some of the higher applications of a true mental science, when he said, "With the progress of our science we ought to be the true legislators and educators of the future." Mr. Commissioner Browne also indicated how important its culture is, in regard to the development of a mental Hygiene which shall be available to the prevention of mental disorder and defect. I will not discuss the question whether insanity is relatively more frequent now than formerly or not; what is certain is that the insane population to be provided for, is, as it has been, increasing year by year; so that any means which will diminish this pressure on the finances of the country will be welcome. Now, I think it is capable of proof that mental science, as you cultivate it, can be applied to legislation so as not only to diminish the numbers of the insane, but also the amount of pauperism and crime. In the same category might also be included more enlightened systems of instruction and training for all classes, inasmuch as the same means which serve to elevate and strengthen the mind serve to prevent that degeneration upon which insanity, vice, and crime depend as branches from a common stem. An admirable illustration of the value of statistics to applied mental science in this direction is afforded by Dr. Guy's paper "on Insanity and Crime, and on the Plea of Insanity in Criminal Cases," read to the Statistical Society of London. Since your mental science is based on physiology, all applications of it of this kind exercise a direct influence on the solution of social questions, which is impossible with that academic mental science that practically repudiates physiology as a basis.

Considered from this point of view, your Journal, I need hardly say, is not equal to its name. Its shortcomings are as obviously due to a defective organization. Your primary and written objects being the pathology and treatment of insanity and the management of the insane, your more advanced and unwritten the culture of mental science, it reflects the indefiniteness thus arising. It is necessary, therefore, to reorganize your Journal, so that it shall more clearly and definitely represent your views. I think, to this end, you should call upon the members generally to co-operate with a Journal committee, composed of members entrusted with special departments. If you really mean to extend its circu-

lation and influence, you must give clear and distinct prominence to these questions, partly speculative, but eminently practical, which excite the public curiosity. In short, you should include mental organology and physiology in their relations to anthropology on the one hand, and to comparative psychology on the other. It is an interesting fact, and worthy special record, that Professor Huxley has lately proposed the formation of a section of Comparative Psychology in the Ethnological Society. None can doubt the immense, the fundamental value of this department of mental science; but those who, like myself, have endeavoured to utilise, will readily comprehend that without it many forms of mental degeneration must remain unexplained. I am glad to announce that Mr. Brooks, the secretary of the section, and Professor Huxley are quite ready to co-operate with you in this important study, and I therefore recommend that a standing committee be appointed for this purpose. It cannot be denied that these sciences have their speculative problems, as well as philosophy; but if you keep steadily in view that yours is an applied mental science, and thus look to the practical ends of all discussions and researches, speculation will find its appropriate uses.

Physiological anatomy and chemistry, applied to mental pathology and therapeutics, might be relegated to another standing committee. How much might be done in the empirical observation of remedies like digitalis, aconite, opium, arsenic, by the organised researches of officers of asylums, needs no exposition: you are all aware how little is accurately known of our most available remedies. Further, are you to continue wearied and helpless spectators of those sad cases of hitherto incurable dementia, which encumber the asylums by thousands? There are facts which point to the conclusion that your art has triumphs in store in this direction, for it occasionally happens in the worst of these cases that the clouds temporarily clear away from the enfeebled intellect to an extent that seems almost miraculous. What are the conditions of the brain which underlie these temporary restorations? Changes in the temperature of the brain-region, or in the vasomotor activity, or both, would suffice for the change in mental manifestation; the problem would therefore be how and when to produce these changes by art. Whatever theory we may adopt, biology applied to clinical research would help to solve these practical problems. In this direction experimental therapeutics might be of essential use; as

for example, researches into the influence of the cervical sympathetic ganglia and spinal cord on cerebral function either by means of galvanism or otherwise. Other illustrations of this kind are afforded by those cases in which there is little apparent disorder or defect of the understanding, yet severe lesion of the convolution—such cases are often adduced to prove the rash negative that the brain has no share in mental activity—by the opinions of those who maintain that the whole brain is active in every mental state, and by the doctrine that the brain subserves mental activity exclusively. In my judgment, none of these are in accordance with facts; but whether any—and which, if any—be correct can only be settled by careful researches into the anatomy of the brain. A more exact naming of the convolutions will serve to this end, together with the recent researches into their microscopic anatomy, which show great convolutional diversity in that respect, and which I am glad to learn my accomplished friend, Dr. Lockhart Clarke, will show you.

The new doctrine of the correlations of the forces of nature has important relations to an inductive mental science, inasmuch as all the molecular and nutritional changes which coincide with mental activity can be finally referred to one or more of these forces, such as heat, chemical affinity, magnetism, galvanism. Changes in the nutrition of the brain-tissue coincide with some of the highest phenomena of the human mind; for example, ideas of the infinite as to both space and time are singularly modified in insanity with general paresis, in the opium and haschisch eater, and even during dreaming under special conditions of the brain. These facts are now so numerous and so certain that the new atomic theories and the old philosophies seem to have changed places; in short, physics now appear to be essentially spiritual and metaphysics material; so that the old war cry of materialism ought to be a thing of the past. It is the fundamental fact of our inductive mental science that any and every state of consciousness may be changed by agents which operate changes in the molecular condition of the brain tissue, but then these agents do themselves act through their inherent forces. There are, however, modern physiologists of repute in other departments, who, being still under the dominion of the old philosophies, cannot even comprehend how it is possible that more or less of oxygen and of nutrient materials sent to the brain can influence the human will. If they were not acquainted with the reasons—that is to say, with the order of

events—they would be equally incredulous if told that under certain circumstances a spark applied by an idiot to a few grains of gunpowder would lay a city in ruins. To this class of minds the demonstration of the facts in question is needed. These facts are wholly incompatible with barren discussions as to materialism and immaterialism. The practical relations of cerebral nutrition to attention, memory, imagination, and the exercise of the intellectual powers in general are infinitely more important to philosophy, because they cannot be studied in that careful way which befits true science, without leading to higher and higher views of the spiritual nature and destiny of man.

These, then, are the chief topics with which a Journal of applied mental science must deal, and which a Journal committee would consider.

The better education of the medical profession in all that relates to mind is another of your chief objects, although unwritten, and might well be entrusted to an educational committee. It is nearly half a century since Dr. Conolly gave a systematic course of clinical lectures at Hanwell, and urged on the profession the study of mental diseases. Sir James Clark, in his interesting memoir of Dr. Conolly, gives a valuable history of the attempts that have been made to extend medical education in this direction, and of their comparative failure. To Dr. Maudsley is due the credit of pressing the matter successfully upon the Senate of the University of London, so far as to induce that body to allow three months clinical study of mental diseases to reckon for hospital practice. Anything short of compulsory study will, however, fail. Sir James Clark most truly remarks that the subjects of medical instruction which are left optional, of which insanity is one, are neglected by the majority of students. Although about one-third of the graduates of Edinburgh enter my class, not more than a fourth or a fifth really study the subject, although every facility is given. When formerly the army and navy medical boards required certificates of attendance on lectures on Insanity, my friend, Dr. Skae, could collect a class; but the regulation was abolished—why, I know not—and thereupon the attendance of students became so scanty that Dr. Skae discontinued his lectures. A committee might usefully take in hand the duty of incessantly bringing the weight of public opinion to bear upon the legislators in medical education, so as to procure that mental medicine shall constitute one of the essential and compulsory

departments of medical study. The results would be excellent in every way. It would be the least good result that your assistant physicians would come to you better qualified for their duties, because it is certain that if all our academic hospitals had wards attached to them for the reception and treatment of mental cases in their earliest stages, the knowledge that would thus be gained by the student would be available to the cure of multitudinous cases, without restraint in an asylum at all. These practical advantages would only avail indirectly, however, to the third class of objects you have in view—namely, the scientific advancement of medical psychology, more especially in the department of mental pathology and therapeutics. I need not formally prove that in these, as in other departments of medicines, the only solid foundation is to be found in the great science of life, or biology. The combination of science and practice in teaching has been my object for the last twelve years in my courses on Medical Psychology and Mental Diseases, with results fairly satisfactory, although cerebral physiology is still imperfectly taught. Now, in the great public asylums there is all that is requisite for scientific research, except assistants qualified by scientific training, and endowed with the zeal which makes scientific labour lightsome. I see no other means to this end than a suitable scientific and practical examination of candidates for asylum appointments. I have been enabled to institute such examinations at Edinburgh by the kind assistance of Sir James Coxe and Dr. Browne. Dr. Crichton Browne's plan of clinical clerks would usefully form part of any such arrangements.

From all these considerations, it follows that at least five standing committees are needed, viz.—1, for asylum hygiene; 2, for mental pathology and therapeutics; 3, for defence; 4, for education; and 5, for Journal management and correspondence with societies having kindred objects. The important question remains whether the members of the association, and more especially the younger members, will take part in the work: of their capability I have no doubt.

One other defect in your organisation needs attention, viz.—the infrequency of meetings of the members. By way of remedy it was resolved last year to hold quarterly meetings of the association in London exclusively. This rule necessarily prevented those who lived at a distance from attending them. It appears to me that similar meetings might be held elsewhere with great advantage. I understand that this step

has been found practicable in the north of England, and I know it is thought to be desirable in Scotland. There is nothing in the rules to prevent such local organizations being established anywhere as may be convenient to members. A metropolitan branch would be almost a necessity.

Such, then, being the remedies for the defects in your organisation, I have now to ask you to consider them. When in 1865, a former president, Dr. Wood, brought subjects like these before you, and Dr. Monro, his immediate predecessor in the chair, expressed a desire to discuss them, your general secretary effectually stopped all discussion on a point of order. If a like objection be raised on this occasion, I shall feel it my duty to rule differently and permit discussion, being of opinion that the resolution which is to be advocated for the fusion of the association with a London society, opens up the whole question of your objects and organization. For this reason, I also consider it my duty to guide your deliberations upon that measure by pointing out its nature and probable results.

It must be admitted that the constitution of a psychological section in the proposed new Society of Medicine of London is a valuable result of your organisation, and whatever may be your decision, your cordial thanks are due to those Fellows of the Royal Medico-Chirurgical Society who have given psychological medicine a prominent and becoming position in their arrangements. But the question is—will you, in return for the transfer of your organization and pecuniary support, attain advantages equal to those you now possess? Beyond the prestige of a connexion with so important a body, the advantages offered in return are only two—namely, a place of meeting in London, and access to an extensive library. The extent to which these can be made available by the members has already been shown by the experiment of the quarterly meetings. Members resident in or near London will appreciate them, but the numerous non-resident members will find them useless. I speak on this point from long experience as a non-resident fellow of the Medico-Chirurgical Society. On the other hand there are obvious disadvantages. You are invited to constitute this section as one of the several medical societies that meet in London, but you are an imperial society, and meet elsewhere than in London. Secondly, you are neither a purely medical, nor a purely scientific body, as the proposed section will be, so that a new association would be required to attain some of the

fundamental objects of your existing association. Thirdly, it is doubtful whether if your Journal be merged in the transactions of the section, psychological medicine itself will not rather lose than gain by the change. Papers must be read in the section before they can be printed in the transactions; but before they can be read, and if read, before they can be printed, they must be approved by the committee of the section. You would thus exchange the freedom of the press, and the ready publicity now afforded to you by your Journal, for a censorship and a circumlocution office in London. Now, what you want is more publicity, freer action, and a more extended sphere of influence amongst the general public, as well as the profession. Further, it is doubtful whether the funds of the section would suffice to provide a volume of transactions equal to your Journal, even if the whole association joined it, because a certain proportion of the sectional subscriptions must be paid to the general treasurer of the society; whereas it is certain that nearly the whole amount is needed for that purpose. It is certain, moreover, that the whole association will not join the section, and it is almost certain that the dissidents would form a new society to take the place of the dissolved body; so that the final result of the scheme would be, that you would be weakened in every way rather than strengthened. There are also obvious objections to the constitution of the new society; these, however need not be stated.

Although these and other considerations may cause you to decline the proposed scheme of fusion, the scheme of a psychological section in the new society merits your support. It would be to the interests of those members who could avail themselves of the advantages offered to support the section, and through them the general body could co-operate with the new society in offering space in your Journal for its psychological transactions, in return for a moderate pecuniary contribution to your funds, and in any other mode that might offer.

Whatever you do, I think your best line of policy will be to maintain your present unity of objects—secular, practical, scientific—for so soon as you dissolve it, you endanger your unity of action. And I cannot but express my wish that the fusion of the Royal Medico-Chirurgical Society had been with the three other chartered medical corporations of the metropolis, and with the British Medical Association, so as to have effected the union of the whole profession for the

attainment of those three great objects of medical societies. I see no grounds, either in policy or in justice, for the appropriation of the taxes levied upon entrants to the profession to the establishment and maintenance of halls, libraries, and museums exclusively in the metropolis. It appears to me that a portion of the funds should be appropriated to the uses of the profession in general, by aiding in the establishment of similar facilities out of London. In this way each of our large towns might be made like the metropolis—the centre of a district, with its library and its faculty hall, in which the professions of the district could meet and discuss all that concerns its interests as we are met to day. I am satisfied such an appropriation of these taxes is not more just than it is expedient for the advancement of medical science and art. It is not too much to say that the secular interests of the profession have been almost wholly neglected by the metropolitan corporations.

An Apology for Lord Brougham on Psychological Grounds. By
DANIEL H. TUKE, M.D., M.R.C.P.

(*Read at the Annual Meeting of the Medico Psychological Association, held at York, August 2nd, 1869.*)

LORD BROUHAM'S career has repeatedly been the theme of mingled admiration and regret—admiration of his remarkable talents and eloquence; regret that one so gifted should have failed to sustain the position and reputation which he once enjoyed.

We all know Miss Martineau's mournful contrast, in her admirable "History of the Peace," between the Harry Brougham of 1830 and the Lord Brougham of after years, coquetting with Lyndhurst, and ultimately uniting with him as the bitter foe of the Melbourne Ministry. Miss Martineau, in common with others, evidently experiences doubts as to the perfect sincerity and integrity of purpose of the Member for Yorkshire, and does not offer any apology whatever for his erratic course, or suggest any kinder explanation of his career beyond what she calls, and what most, if not all, call, "his temper of jealousy and irritability, his restless and insatiable vanity."

I think, however, that the study of his life and antecedents does not allow us to leave the delineation of his character exactly here, and does offer, or at least suggest, an explanation of, and an apology for, his versatile conduct and undignified behaviour.

If from his mother he inherited the gifts which so distinguished him, he appears to have derived from his father unhealthy tendencies, which bordered close upon the verge of mental aberration, and at several periods of his (Lord Brougham's) life actually amounted to it. Here, as I incline to think, will be found the true and the kindest solution of the problem of his political life.

That Brougham's mental condition at the periods of his life to which I refer was something more than mere eccentricity—that there were times when a certain latent insanity seemed to break out and assume an active form—will I think be deemed highly probable by those who will do me the favour to listen to the circumstances in his biography to which I wish more especially to direct attention. Of course, with only very limited information at command, I cannot adduce the rigorous proofs which Mental Science justly demands, although, for the sake of discussion, I may seem to imply a decided opinion, and run considerable risk of appearing to fall into the error of confounding the natural traits of a strongly marked but healthy character with the results of disease, and jumping to a conclusion on insufficient evidence. I will risk this charge, however, in the hope of obtaining information, and, if necessary, correction.

His mother, the niece of Dr. Robertson, was, we are told, "a most remarkable woman for intellect and for acquirements;";* but Mr. Brougham (the Chancellor's father) was unfortunately remarkable for his "eccentricity," and I think we shall find, in tracing the life of the son, that we have another illustration of the observation frequently made, that the eccentricity of one generation exhibits itself in an intenser form in the next.

Brougham's conduct when a young barrister of 22 is, so far as I know, the first circumstance which would suggest the view submitted in this paper. Sir Thomas Lauder says that "about this time his conduct was so eccentric that he was

* My authority here, as well as in numerous instances, is the recently published life of Lord Brougham, by the late Lord Campbell. Its imperfections and faults are obvious; but the absence of reserve on points upon which most biographers are silent, is a great assistance in an enquiry like the present.

supposed to have shown a slight tendency to insanity, and his friends were very uneasy about him." He appears to have taken to wearing spectacles, on the suggestion that he had suddenly become short sighted; to have ridden away from the circuit town upon the horse of a friend, against his friend's will, and to have thrown some tea over a young lady, for which he was called to account. What more he did to cause uneasiness to his friends is only hinted at, and not related. These incidents in his life, though amusing in themselves, are really sad, seeing they form part of that phase of his mental history which so grievously injured his position; nor would one even repeat them, were it not absolutely necessary in presenting evidence on the question before us. A public character becomes public property, and one is obliged to pourtray its weaknesses as well as its strength, in order to estimate it fairly.

Then, when Brougham returned from his circuit to Edinburgh, "he fell ill," says his biographer, Lord Campbell, "and was for some weeks confined to the house, suffering from great depression of spirits, supposed to be brought on by over excitement." However, he was soon at work again, vigorous as ever. This resiliency was a striking feature in his character.

Since this paper was written I have read the Review of Lord Campbell's *Lives of Lyndhurst and Brougham*, in the *Edinburgh*, and I find a reference to this particular period of his life, which is of great interest. In passing, I may observe that the author of this article takes essentially the same view of the mental condition of Lord Brougham as I have done, although he may not so fully recognise in it the cause of his comparative failure as a Statesman. The circumstance to which I refer is as follows, and is honourable to Brougham's feelings. He had a favourite brother, Peter, beloved beyond all his kindred. In 1800 he joined the army, and was soon after killed in a duel with a brother officer, when on his way to India. "This sudden and tragical bereavement actually unhinged his mind for a time—so he himself believed. There were," the reviewer continues, "various periods in Brougham's life in which that over-vigorous mental frame underwent a partial collapse, and this was one of them. He was—or afterwards fancied that he had been—possessed by an irrational desire of vengeance on the murderer, and burned to set out without delay in pursuit of him, under a

temporary forgetfulness that the object of his anger was in another quarter of the globe." (Edin. Rev., Ap. 1869, p. 577.)

Brougham's subsequent career until he became Lord Chancellor in 1830, was brilliant indeed, though not free from symptoms of instability, which excited uneasiness and surprise. And however brilliant his course as Chancellor, these symptoms were but too frequently apparent, and converted many of his friends into foes.

It is a striking fact that at this period the death of another brother (James) again strongly affected him. "To his death," observes Lord Campbell, "may be ascribed the fantastical acts and the misfortunes which soon after marked the Chancellor's career."*

It is possible that Brougham's unfortunate tendencies might not have been so fully drawn out, or at least so conspicuous, had he never been raised to the woolsack. His mother with, it might seem, a discerning insight into the mixed inheritance of her son—the genius and the madness—did not encourage his elevation, and kindly but decidedly expressed her misgivings, when she heard he had been made Lord Chancellor.

It would be interesting to know how soon after the celebrated interview of Lords Grey and Brougham with the king, in which the dissolution of parliament is stated to have been urged, the Chancellor gave that version of it which Mr. Roebuck has adopted, but which now appears to have been singularly incorrect. The "Edinburgh Reviewer" fears that the baselessness of these curious romances is demonstrated; and proceeds to ask whether they were mere inventions, or owed their origin to some delusion? "The latter," he replies, "is our own hypothesis, and though the subject be a painful one to dwell on, it cannot be passed over in any attempt, however slight, to judge impartially of so great a name. The truth is, we cannot doubt, that at this time Lord Brougham's head was turned, not in a figurative sense, but literally; over excitement, vanity sometimes gratified and sometimes irritated, incredible labour and constitutional rest-

* It is much to be regretted that the biographer immediately escapes from the track upon which for a moment he here enters, in correctly describing the *order* of events, and ungenerously adds, "but I much doubt whether anything could have saved this misguided man from the promptings of the evil genius which he carried about with him in his own breast, and which was ever ready to lead him astray," Life, p. 432.

lessness had done their work on that powerful but abnormal brain." (Ap., 1869, p. 598.)

Then when Lord Grey resigned and Melbourne became Prime Minister, Lord Brougham, during the remainder of the session, "did play fantastic tricks," says Lord Campbell, "which, if they did not make the angels weep, made the judicious grieve" (*op. cit.*, p. 436). It is no unfriendly hand which speaks of "those days of discreditable memory;" of "the outrages which he was in the habit of perpetrating, not only on dignity but decency;" of "his wearisome self-laudation;" "his grotesque extravagances;" his "capriciously malevolent and eccentric selection of the objects of his antipathies" (Edin. Rev., Ap., 1869).

The *Times*, about this period, charged him with drunkenness, and another paper with opium eating; but though he certainly took a liberal supply of mulled port during the delivery of some of his orations, and was not a teetotaller at other times, may not the real and more charitable explanation of his "fantastic tricks" be that which I have brought forward for your consideration?

"We have stood by him," wrote the Thunderer, "for 15 years, but are now compelled to throw him over For some months past Lord Brougham has been under a morbid excitement, seldom evinced by those of his Majesty's subjects who are supposed to remain masters of their own actions." The writer of this paragraph was probably not at all aware that it was literally true, and being true, ought to have gone far to excuse the actions of the Chancellor, however much it rendered him unfit for his office.

Very shortly followed his excited tour in Scotland, during which he made speeches which ruined his own prospects, and probably hastened the downfall of the Melbourne ministry. "From the end of the Session of 1834, through his wild visit to Scotland, and for many months after, his mind," says the writer in the *Edinburgh Review*, "was clearly off its balance His temperament became for a time uncontrollable, his perception of facts and of reasoning greatly disordered" (p. 595).

It was then that he played such indecorous pranks with the great seal that King William was in a state of real consternation. The remark he is reported to have made strikingly bears out what I may call the insane theory of his conduct on this and certain other occasions.

"I cannot account," the King said, "for the Chancellor

clandestinely running away with the Great Seal beyond the jurisdiction of the Court of Chancery, except upon the supposition that *he is out of his mind*, of which there have, for some time, been strong symptoms." (Life, p. 453.)

When, after a short Tory Administration, Lord Melbourne was restored to office, but refused to have Brougham in the Cabinet, saying, "it is impossible to act with him," disappointment, chagrin, and indignation aggravated the disordered condition of his mind, and rendered it absolutely necessary for him to retire for a time completely from public life. Lord Campbell expressly states that "his mind was very seriously affected." "Parliament met on the 14th of February (1836), but he did not appear. It was given out that he would come at Easter. Easter arrived, but no Lord Brougham, and when the prorogation took place, after a Session considerably shortened by his absence, he was still at Brougham Hall. A debate in the House of Lords during this quiet and dull period was likened to the play of Hamlet, the part of 'Hamlet' omitted on account of the indisposition of the first tragedian of the company. . . . Though generally plunged in deep melancholy, the recluse at times fired up and said 'he would be off to London,' but his medical attendants would by no means permit him to leave Brougham Hall till his spirits should be more equal."

"The first good news I heard of Brougham in his seclusion," says his biographer, "was from Baron Parke, who had gone the Northern Circuit as Judge, and in this month of September (1836) found him calm and composed. He was now in the habit of taking long walks in the fields; and avoiding politics, but joining freely in professional gossip about silk gowns, special retainers, fees, verdicts, remanents, and references, he almost seemed himself again. His recovery proceeded steadily, and at the opening of the next Session of Parliament he returned to London in full vigour of body and mind." (Op. cit., p. 477—8.)

That Lord Brougham's mind was thoroughly unhinged at this period as the *result* of the neglect he received, is obvious to his biographer (Lord Campbell), but he does not appear to see (or if at one moment he sees it, he afterwards entirely forgets) that an unhealthy mental condition was to a large extent the *cause* of the strange actions which led to this neglect. He speaks, indeed, of the promptings of "the evil genius," which led "this misguided man" astray, but he evidently has no intention of conveying the idea of an apo-

logy: the impulse which misguides is altogether evil; and the biographer seems almost to chuckle over the result. If Lord Campbell really believed that the Chancellor's mind was previously upset—that the fantastic tricks resulted from the impression produced by the death of his brother James, it is cruel and inconsistent to blame him for the extravagances which he committed in consequence of an unavoidable event and an honourable sorrow.

If then, as I venture to suggest, there lurked in the nobly endowed mental constitution of Lord Brougham a latent germ which on several occasions was developed into an actual phrensy, it explains why his colleagues and his Royal master were so startled as to resolve on the course of exclusion they so firmly pursued; it explains the presence in his portrait of a "blur," as Miss Martineau, in her recent work—"Biographical Sketches"—happily expresses it, "where Lord Brougham should have been."

Charity ought to rejoice to find a legitimate excuse for the irregularities of genius, and the biographer must be either malicious or ignorant who, not availing himself of it, condemns them as inexcusable crimes, or treats them with unfeeling levity. To the subtle disorder of those delicate mental forces whose integrity is essential to sustained power and success, will he attribute the extraordinary fact that the successful Chancellor who enjoyed "a greater supremacy and popularity than any of his predecessors, Cardinal Wolsey alone excepted," and was dubbed Henry IX. by the bar, not only fell from his high estate, but never rose to office again, or to a commanding position as an independent statesman, although living six and thirty years longer, and in the possession of so many remarkable mental gifts.

Let us take this generous, and as I submit, probable solution of the enigmatic course of a man of whom the *Times*, from failing to recognise it, thus wrote—"It is by impulses of temper or of pique, more of a selfish than even a capricious nature, and abstracted from all broad or distinct considerations of national or general good, that the course of this impetuous and, in some respects, formidable adventurer on the scenes of public life has hitherto been shaped and directed."

Impartial history, if guided by sound psychological principles applied to the character and acts of Henry Brougham, will, I believe, tell a different tale, and while mingling profound regret and pity with admiration of his talents, will record no indignant surprise, but will acquit him of a large

portion of the blame which by friend and foe has been so freely cast upon him.

I have only to add in conclusion that I have endeavoured to connect in a continuous history the scattered references to Lord Brougham's morbid mental characteristics, which I have been able to find, and I think it more than probable that if such very incidental references point to the conclusion referred to, further knowledge of his life and that of his ancestors would strongly confirm it. As I said before, with such scanty materials at command, I rather bring them forward before the Association to ascertain how they strike other minds, than dogmatically to advocate an opinion myself. If, indeed, I seem to have arrived at a definite conclusion, I wish it to be distinctly understood that I regard it as subject to the correction which fuller evidence may demand, and should feel much indebted to any members who would favour me with unpublished facts which may be known to them, calculated to throw light on this remarkable man's mental history, and thus complete, as far as possible, my very imperfect sketch of the psychological biography of Lord Brougham.

On Physical Disease from Mental Strain. By BENJAMIN W.
RICHARDSON, M.D., F.R.S., Fellow of the Royal College
of Physicians.

(*Read at the Annual Meeting of the Medico-Psychological Association, held at York, August 2nd, 1869.*)

In an address I had the honour to deliver before the St. Andrew's Medical Graduates Association in November last, I took the opportunity briefly to direct the attention of those practitioners of medicine who are not specially engaged in the treatment of the insane, to the great importance of recognizing the influence of mental action on physical disease. I ventured to press the fact that the most scientific physicians have fallen into the error of studying, with too exclusive a care, the observable conditions of the body, healthy or diseased, and those agents or agencies for curing diseases which produce the most obvious effects—such as knives and other instruments, anaesthetic vapours, active drugs, heat and cold, electrical shocks, and the like. I admitted that as the pure physical existence is the groundwork and the primary neces-

sity of the highest form of living thinking thing, it is by nature the first duty of the healer to make that corporeal frame pure and whole, but I insisted that it is equally his duty to study what shall enter by the senses or windows of the mind, and though invisibly entering, be potent forces for evil or for good. Because an agency is not visible, not tangible, is it, I asked, less real? If a man lose his mind by the failure of his blood, that, it is said, is plain to understand, for it is physical; but if some horror come upon the man through his mind, so that, like poor Horatio, he is be-chilled

“Almost to jelly by the act of fear,
Stands dumb, and speaks not,”

is not that, too, physical?—an action direct of mind on matter, reversing the physics of the body, and creating disease? It must be so; and in the study of this action, from the universe into the man, there lies, I maintained, a world almost unknown.

I argued further that, with strange acuteness, charlatans of all kinds have touched, without understanding, this unknown world. They have played, it is said, on the credulity of man; they have done more; they have, in ignorance of what they were doing, touched the animal motion through the direct entrances by which the universal spirit enters also. I urged that the need for new contemplation in this direction increases with the intellectual development of the race; that the animal body, in order to maintain equality of power, and be the equal of the soul within it, must, in the course of the suns, be replaced by an organism more finely moulded, more accessible to the external beauty and harmony, more sensitive of pain, more sensible of weakness, less susceptible of maladies evidenced through matter, more susceptible of maladies evidenced through mind, and more impressionable to cure or to injury through the mind than through the baser body. And, lastly, I submitted that to study these changes of existence and action, to open this unknown world of natural truth, not to trade upon the knowledge of its existence, but to comprehend it with the grasp of a philosopher, are tasks to which the man of physic must devote himself with zeal, or recede with humiliation from one of the strongest seats in philosophy.

The subject thus glanced at in the address to which I have referred is the key note of the present effort. I am desirous to bring before you who are most conversant with

the mental side of disease, the question I have opened from its physical point of view, and to illustrate how in many and various ways the practice of medicine becomes a single and simple art and science in the hands of those who treat the disorders exhibited either through the phenomena of the mind or the body. This is my primary object, but there is another, hardly secondary. I am anxious also to put before the world at large the existence of certain physical social evils which are under perfect control, but which, developing with an increasing intelligence, are degrading the physical powers of our most powerful men, and as I think are interfering with the progressive development of powerful generations of men who should, or rather might, belong to the future.

Let me at once guard myself from any suspicion of a desire to exaggerate the evils of mental strain, by the remark that I have no idea of any evil from mental work when that is carried on with evenness and order and generalization. I take the brain to be the most enduring of organs—the organ that admits of most change, the organ that requires most change, the organ that is the most perfect repository of animal force, and the most ready dispenser of it; the organ that can rest in parts when jaded, and work in parts that are not jaded at one and the same time. I look on mental work, and even on hard mental work, as conducive to health of life and length of days. I speak only of evils resulting from extreme strain on one particular series of nervous structures; strain induced either by persistent and prolonged struggle, or by sudden and vehement shock conveyed by the senses and translated too urgently into conscious manifestation.

Subjects of Mental Strain.

Those who become subject to unfair mental influences from intense or prolonged strain belong to particular and easily defined classes of society. They are all mental workers, but as mental workers they constitute classes of themselves—classes distinguished by the character of work in which they move. I divide these classes into six.

First, there is the mere copyist, the man who sits all day at his desk, and transfers copies of writing, or of a speech, to a piece of paper. The clerk, the compositor, the reporter, and the second and third rate author are of this class.

Secondly, there is the thinker and writer, who copies also, but not directly from other writings, nor from thoughts expressed by other minds, but who goes to the great manu-

scripts of the Supreme Author—to the hills, and plains, and oceans, to the living kingdoms of all animals, and of all times, and transfers the pictures of these to canvass or paper, bringing the vastness of the universe, as seen by his superior sense, into moderate compass and legible form, so that lesser minds may read through him the truths he sees and unfolds.

Thirdly, there is the speculative man, usually very selfish and locked up in himself; who from day to day, and night to night, and hour to hour, *schemes*; who walks with his head down, his eyes on the earth, and thinks—thinks how he shall meet this obstacle, waylay that plan, and anticipate such and such events—a truly business man in the world's acceptation; one who is up and down like a Jack-in-the-box, very large when he is up, and out of sight veritably when he is down.

Fourthly, there is the man who carries on his shoulders other people's anxieties, who thinks for others rather than for himself, and must never be tired by the effort: the professional man is here represented; the politician, the physician and surgeon, the lawyer and accountant.

Fifthly, there is the artist, who labours towards perfection at some given task, and, absorbed in his work, forgets the world around, and day after day toils on, supported by the applause of many admirers, and deaf to nearly all else.

Lastly, there is the learner, the student; the child or youth whose will is hardly his own, who works when he is bidden, and plays when he is permitted; who is fed too often with flattery or blows, and between, or by, one and the other, is at length turned out on the world prepared, as it is thought, by education and training, to fight the great and increasing battle of life.

Amongst these classes we meet with those who suffer mainly from the consequences of mental strain; but the injury is very unequally distributed. The copyist, who merely records the impressions he has received, and enters them direct on paper, is subject to little waste of force beyond that which is wasted in muscular action, and his disorders are therefore confined chiefly to dyspepsia, resulting from confinement at the desk, or to the evils of a deficient repose.

The second class of men, those who think as they write, suffer more determinately. With regard their work, however, I believe it need never be made injurious to the health of the body, and that when it is varied and not pressed, it is one of the healthiest of occupations. The dangers to which men of letters are exposed according to my

observation are two only: one the danger of rapid and intense thought with an impulse to chronicle instantly, and at any time, by night as by day what are called "happy conceptions;" the other the danger of writing against time, and sustaining a readiness, at any moment, to write at any length, on any conceivable topic.

The third class of men, the speculators, are a more extreme class, and suffer exceptionally from mental strain. The man who during life has simply to beat down enemies as they come, to take one up and another down, has hard work; but the speculator meets obstacles on all sides, and while he is winning in front, must often find himself held back by a strong hand in the rear. His life is to waylay, to calculate how he shall make up a book that shall win, come what will.

The absorption of this man's thoughts in his own plans and devices removes from him generally the idea of illness and of death. He differs from the man of ordinary business, in fact, in his insusceptibility to the necessities of his own physical existence. His life is surrounded with a kind of vulgar romance, and his own over-weaning self-confidence, his consciousness that he either can or ought to devise schemes and calculations, which must or should carry the day, bear with them an enthusiasm which might well be devoted to a better cause. But by-and-by, in spite of himself, and in spite of the absorption, he begins to fail, and then the usual course is to resort to stimulants by way of support. At last he suddenly breaks down; but buoyed on by constant hope of better days, he believes to the end that he shall recover, and retains his propensities with unflinching determination.

The ailments of the speculator are usually compound in character; for he is, in most cases, a man of active life, and the whole of his organism, muscular and nervous, is equally taxed. If he be a betting man, the race-course or some other out-door pursuit calls him into the open air. If he be a gambler, he is subjected to considerable muscular fatigue. Hence it follows that he is exposed to a variety of exhausting influences. His first symptoms usually commence with irregular action of the heart, and this is followed by results pertaining to a failure of that organ. In the majority of cases he succumbs after exposure to some sub-acute inflammatory disorder. He takes cold, suffers from congestion of the lungs or kidneys, and, unable to bear the shock, sinks rapidly under it, his mind becoming intensely irritable, or

even losing its balance. Then he does some foolish thing, trips in his calculation, and is pronounced "insane."

The professional class of men stand amongst those who suffer most severely and decisively from what may be called simple exhaustion of the nervous system, resulting from active over-work. These differ from the other classes in most points. They differ from the original thinker in that they are neither ordinarily closeted in the study nor working out original designs; but having learned certain facts and principles which the world at large does not comprehend, they are constantly putting their knowledge into practice on behalf of others, and seeing the faults, failings, and miseries of humanity, they become in time inured and ready for every surprise. They differ from the speculator in that they have, after a time, but little enthusiasm. They learn of the Preacher that "all things are alike to all;" they incline further with the same authority, that all things come alike to all; that "as it happeneth to the wise, even so to them; and they praise the dead which are already dead more than the living which are yet alive." Notwithstanding this, their philosophy fails them as their physical life advances. They suffer greatly from little annoyances connected with other men's concerns, and in the very fulness of their self-sacrifice—for of all men they least consider their own private concerns—they become morbidly sensitive to slights of every kind and more dissatisfied. Success, which in early time was the object of their life, brings with it terrible cares that are not unfrequently harder to bear than the worst failures. Having made a position, they must maintain a position at all risks; and having attained their rank, must sustain it despite time and labour. Add to these things the responsibility, that the labour done is for others and is open to the criticism of circles of people who know nothing of the difficulties, but are consistent in the belief, that if they had had the management they could have done so much better,—and the picture is complete.

In the members of the professional class the brain is constantly being exercised without enthusiasm, and the body is daily being exercised without any sufficient rest. The result is that the excitement of brain which leads to insanity is exceedingly rare, and that those physical ailments which follow as secondary to the overworked brain become developed. The professional class suffer largely, therefore, perhaps mainly, from physical affections. Diabetes is exceedingly com-

mon. Paralysis of the limbs, with little interference of the mental faculties, is another common type of disease. Affection of the kidneys, degeneration of the structure of those organs, is a third condition ; and disorganisation of the heart is a last, and by no means rare, occurrence.

Men whose lives are devoted to the arts are infinitely less subjected to the graver physical evils than are either the professional men or the speculators. Their ailments, however, differ materially, according to the line of art which is pursued. Those who follow painting as an art, while they are sometimes for long hours shut up in the studio, and are working almost like men of literature, are nevertheless allowed recreations and pleasures which greatly relieve the monotony of their lives, and add, in no small degree, to their health and happiness. Thus they make their journeys to Rome, Venice, and various parts of England, and, indeed, lead an existence which is most invigorating and delightful. Exemptions must of course be made for those who suffer from pecuniary difficulties, who labour for the mere means of existence, and are obliged in the studio to conjure up subjects for the pencil from the recollections of the past. But compared with the mass of mental workers these are very few, too few for any inference to be drawn or fact displayed as to their special diseases. Artists, painters, as a whole, may then be considered as exempt from various mischiefs, but they have trials which tell upon the heart, in respect to the position which shall be gained by the work which they have done. I believe this is really the greatest mischief to which the painter is liable. His work is so light, so chaste, so fruitful of enjoyment, and so confined to those hours of the day when the sun shines, that he cannot suffer greatly from real over exertion. But for these very reasons, being retired from the world and understanding little of it, he chafes sorely under unjust criticism, and frets himself into a nervous hesitating condition, which renders life sometimes a burden, prolonged, and hardly to be borne.

Concerning those who follow poetry as an art, we have heard much said—a vast deal more, I take it, than ever was true—respecting their sufferings. In short, the world has not produced a sufficient number of poets for us to calculate whether poetic art is at all destructive of mind or of body. The instances of destruction are too few and too questionable to be relied upon, and the romance which surrounds destroyed poets is too extreme to be believed in by the physician.

The dramatic artist differs from the classes previously

mentioned, both in his labours and in his sufferings. To men of strong build and firm will—to men who possess by nature the very faculties which they represent—dramatic art may offer few anxieties or perils, and we know from experience that some of our greatest dramatists have passed through their active careers, extending over a long life, without suffering beyond other men; but if my experience serves me rightly, the majority of players are very differently placed. A man in the studio can labour at works of art calmly and quietly, thinking, as he touches the inanimate canvas, of what will be said of the result. But this is very different from the art in which the man transforms his own body into art, and has to appear suddenly before a crowd, exhibiting himself in attitude and character, personifying what he has never seen. To get up to this ordeal, the intensest labour and presence of mind are required, the strongest will and the most refined ideal. We have an illustration of this intensity in those cases common, I believe, to almost every player—when the artist, at his first appearance, is said to be “stage struck,” when for the moment the circulation stands still, when the muscles are rigid and the face deathly. That is the first, and probably the most painful ordeal, but it is an ordeal which rarely ceases altogether with the first appearance. Without manifesting itself with the same active symptoms as those that are combined at the stage struck period, it exhibits itself in a nervous irritable excitement, which intensifies up to the period when the time arrives for taking part in the proceedings, and then gradually subsides during the performance, or is even transformed into enthusiasm, to be followed, when the excitement is over, by a depression that may amount even to despair, a depression which applause and admiration do not satisfy, but which unjust or unfair criticism goads either into melancholy or apathy. Under these influences, many of our really best players sink into second or third positions, not because they are wanting in the talent to stand first, but for the simple reason that they prefer the ease of mediocrity. For this reason, some of our players who do stand first, owing to the constant irritation to which they are subjected, become cross, irritable, or desponding, finding no satisfaction in the temporary approbation which they achieve, but overwhelming chagrin at every shade of disappointment. Still more, in the very act of the sustaining of certain characters on the stage, telling physical efforts are called forth, which de-

mand a degree of muscular exertion, mental strain, and expenditure of vital force altogether, of which the mere looker-on has no adequate conception. Take the play of "Othello," for instance, as indicating the character of the labour that is required in the actor. The mere effort of speaking such a play well is beyond the reach of ninety-nine men out of a hundred; and then to add to the speech the action, the studied expression, the passion,—what can be more onerous, exciting, or severe?

The labours of the players tell mainly on the heart. That organ becomes irregular in its action; then, for a time, large and overstrong, and finally degenerate, feeble and uncertain. With this there are combined excessive timidity, sleeplessness, persistent dyspepsia, paralysis, and gradual decay. Whenever sensations thus excited unfortunately lead the actor to resort to the use of stimulants; when without a stimulant he is unable to meet his audience, or to recover from his labour, he is beginning to suffer from a second destruction, more fatal than the first.

The extent to which over mental strain is injurious to the young, varies according to the kind and character of work. The endeavour to fill the minds of children with artificial information leads to one of two results. Not unfrequently in the very young, it gives rise to direct disease of the brain itself, to deposit of tubercle if there be pre-disposition to that disease, to convulsive attacks, or even to epilepsy. In less extreme cases it causes simple weakness and exhaustion of the mental organs, with irregularity of power. The child may grow up with a memory taxed with technicals, and impressed so forcibly that it is hard to make way for other knowledge, and added to these mischiefs there may be, and often is, the further evil, that the brain, owing to the labour put on it, becomes too fully and easily developed, too firm, and too soon mature, so that it remains throughout manhood always a large child's brain, very wonderful in a child, and equally ridiculous in a man or woman. The development in an excessive degree of one particular faculty is also a common cause of feebleness.

I knew an instance in which a child was "blessed" with a marvellous gift of verbal memory. This being his "forte," his teacher, who wished every scholar to be remarkable for something beyond other scholars, played on this "forte" powerfully, and with wonderful effect. By constant cultivation of the one faculty this marvellous

boy could learn off fifty lines of "Paradise Lost," or of any other English book at a single reading, and could repeat his lesson on the spot, without missing a word or omitting a comma. But the result was this, that when this remarkable boy was sent to a university to learn a profession, he was beaten in the learning of detailed and detached facts by every fellow-student. Seeing slowly but surely where his weakness lay, this student ceased at last to call into play his remarkable talent. It was a terrible task; he accomplished it at last, to a considerable degree; but never effectually. For a long time he made mistakes that were most annoying; he was unable, for instance, to cast up accurately any column of figures, he forgot dates, he ran over or under important appointments, misnamed authors in speaking of works of art or letters, and in reasoning he would mix up two or three subjects. It took him full ten long years to unlearn his wonderful technical art.

For the reasons given I have always persistently opposed the special prize system in schools. As a teacher with large experience, and as a student, I can recall no single instance in which noted prizemen in early youth bore away more than other youths the prizes, that is to say, the successes, of after life. I have, however, known many many times the successful prizeman in the class the least successful afterwards, and as often have known the most ordinary man in class come out as the best man in life.

Overwork in the child and in the student defeats, therefore, its own object; it does not bring out the powerful brain necessary for the man: for all life is as a new and great lesson, and some young brain must be left free for the reception of lesson on lesson. Of this there need be no doubt, and there we may leave the first and leading fact; but the danger of overwork unfortunately is not confined to the brain, it extends to the body as a whole. When the brain is over-worked in the growing child, however well the child may be fed, there will be overwaste of substance in proportion to the overwork. There will be stunted growth and a bad bodily framework.

In addition to mental strain induced in the manner suggested above, there is, as I hinted at first, strain from sudden shock, leading to consequences of the most serious character. I have had to determine whether extreme shock requires to be inflicted on feeble or over-sensitive organisms, in order to strike effectively, and I have been drawn to the conclusion

that such is unnecessary, and that the least emotional persons may be influenced. The after effects of sudden mental shocks have, however, been unstudied by that part of medicine which I represent, and I may, therefore, be speaking from too limited experience. Nevertheless, I am clear enough in the fact that I have seen physical evils follow upon mental shock, even in obtuse men.

Special Diseases from Mental Strain.

Diseases following upon mental shock or strain are divisible into two classes. There is a primary class in which the mental shock stands out as the direct and only cause of the malady, and there is a secondary class in which the mental shock or strain appears only to increase or exaggerate symptoms of disease which pre-existed.

In the first class the diseases produced are the same as those which sometimes follow upon the receipt of physical injury to the nervous centres. I notice specially as the most distinct forms of disease of this nature with which I am familiar, diabetes, paralysis (local or general), intermittent pulse, and arterial relaxation with arterial murmur.

Diabetes from sudden mental shock is a true type, a pure type, of a physical malady of mental origin. I have before me the notes of three cases, in which the first excretion of sugar and the profuse diuresis were symptoms as remarkably sequential to severe mental strain, as when, in experiment, we induce the malady by inserting a needle into the brain in the region of the fourth ventricle. The cases constitute a hopeless class, the danger sudden, the course rapid, the fatal end sure.

The symptoms of paralysis from mental strain are usually less sudden in their approach, and are preceded by warnings, which, when noticed correctly, are sufficiently decisive. The most characteristic of these warnings is a sensation on the part of the patient of necessity during any mental effort for frequent rest and sleep; symptoms such as are described so faithfully, by Johnson, as belonging to the case of the Poet Cowley. The cause of these cases is usually clear; it is a progressive course towards general palsy of mind and body, and it is not unlike the decline of mental activity in the age of second childishness and mere oblivion. When this condition exists, at however early a stage, the slightest shock tells on the nervous structures, and transforms suddenly the threatening

malady into the extreme reality. Sudden muscular paralysis is the most common sequence of shock under this condition; it is in most cases, at first, a local paralysis; but it may, at once, be general in respect to all the muscular system under the control of the centres of volition.

Intermittent pulse is, as I have shown on a previous occasion, a physical symptom of cerebral and mental origin. I have never met with a case in which the disorder was not sequential to some anxiety; shock, fear, sorrow, or their similars. I have met with case upon case in which the sufferer has been able from his own perception of the intermittency to register the precise moment when the injury causing it was inflicted.

Arterial relaxation with murmur is the result of injury involving the emotional or organic nervous centres. I have seen it follow on direct physical injury, and I have seen it follow on mental shock as distinctly. It is a common result of intense grief, and is characterised by sudden changes of vascular tension, coldness, chills, frequent perspirations, irregular action of bowels, and, often, diuresis. But the most distressing symptom of all is the arterial murmur. This is usually heard by the patient, and is sometimes mistaken for aneurismal murmur. It is produced at those parts of the arterial tract where an artery runs through a rigid canal, as through the abdominal opening of the diaphragm, or the carotid canal in the base of the skull. In these rigid canals, the arteries being relaxed, the sides of the vessel press, with each impulse of the heart, on the surrounding resisting wall. Thus there is vibration and murmur, and in the case of vibration in the carotid canal the murmur is painfully audible to the patient. In these cases the symptoms are often developed in the most sudden manner, and recovery is again often as equally sudden.

It remains yet to be seen what change in the nervous centres is produced by sudden mental shock. The symptoms lead one to the idea that the change is identical with that which is produced by mechanical shock, or mechanical irritation; but what the nature of the change is has all to be learned. That it is some alteration in molecular arrangement, attended with change in form of matter, is the most reasonable theory; but experiment is still wanting to indicate precisely the modification of structure which is induced.

The class of cases where the symptoms due to nervous

mischief are secondary, include, according to my view, syphilis, some chronic eruptions on the skin (psoriasis especially), cancer, epilepsy, and insanity itself. In all these there is some preceding condition, hereditary or acquired, which, either by causing injury to the nervous structures, or by modifying structure of other parts of the organism, leads to a chronic exhaustion, which is intensified by the slightest nervous shock. Thus the symptoms of tertiary syphilis will recur on venereal excess, without any introduction of new venereal poison; thus eruption on the skin will recur from nervous shock; thus cancer so frequently shows the first signs of its presence on mental anxiety;* and in two cases of persons predisposed to epilepsy, I traced the first seizure clearly to mental prostration. Respecting insanity, I doubt whether it is ever the result of simple mental over-strain; on the contrary, I take it rather to be an upshot of extreme mental inactivity; but when the tendency to it is pronounced, then mental strain excites up the evil.

In this abstract of what I hope soon to complete as a distinct work, I have been able only to glance at the many subjects on which I would like to hear your special knowledge. You are accustomed to look at mental as evolved from physical or social, or transmitted causes acting on the mind by the body. I am trying to look at physical devastations as evolved from agencies acting on the body through the mind. I think, I am not sure, I see the reverse side of a subject which has often been discussed, the relation of mental to physical disease; and the picture thus presented to me is that the origin of insanity, as a concrete fact, is rather to be sought for in inactivity, hereditary and individual inactivity of brain, than in exercise of brain; and that excessive exercise of brain is a cause not so much of mental as of physical derangement. Our uneducated, clodish populations are, in short, as I venture to assume, the breeders of our abstract insanity, while our educated, ambitious, over-straining, untiring, mental workers are the breeders and intensifiers of some of the worst forms of physical malady.

With all simplicity and candour I submit these ideas to your consideration.

* I shall take occasion in the future, I hope with more enlarged experimental knowledge, to show that cancer is primarily a disease of the nervous system, and that the local change we call cancer, with the ulceration which caps it, is the equivalent of the change and death of part after complete arrest, produced by division of nervous communication.

On the Alleged Increase in Lunacy. By FREDERICK MACCABE,
M.D., L.K. and Q.C.P., Physician Superintendent, Water-
ford District Asylum.

DR. LOCKHART ROBERTSON, in the April number of the "Journal of Mental Science," raises the very interesting question whether the increase of late years in the registered number of the Insane in England and Wales represents an increase, real, or apparent only, in the amount of insanity amongst the population at large. After a laborious collection and study of the statistics relating to insanity, Dr. Robertson arrives at the conclusion that the increase is apparent rather than real—in other words, that the number of registered lunatics has largely increased, but that the amount of insanity amongst the population at large evidences a decline, particularly of late years. As a contribution to the study of this question, I venture to offer a few statistics referring to the insane population in the District of the County and City of Waterford.

The statistics referring to the amount of insanity in Ireland differ in some respects from the returns which refer to the state of insanity in England. In the first place, the population of England is shown by every successive census to be increasing—the population of Ireland betrays a steadily progressive decrease. Next, in estimating the numbers of the insane in England, Dr. Robertson, and other students of statistical returns, have had to deal with an *unknown quantity*, represented by the numbers of the insane at large and unregistered. For some time past, at intervals of a few years, the Inspectors of Irish Asylums have procured through the Irish Constabulary tolerably accurate returns of the number of persons in all parts of Ireland who were known to be idiotic, imbecile, demented, epileptic, or reputed harmlessly insane—in short, they have been placed in possession of the numbers of that class of persons who constitute this unknown quantity in English calculations. A third ground of distinction between the returns from the two countries is furnished by the vastly different social position of the inhabitants. Within the memory of the present generation the social aspect of England has undergone important changes. The large increase in the manufacturing industry of England, the prodigious growth of cities and towns, which, in manu-

facturing regions, and in large centres of population, have been steadily absorbing the rural districts around them : the extension of railways—the rapid acquisition of wealth by the middle classes, and the improved position of the great artisan class :—all these causes combined have led many persons to suspect that the excessive energy called forth by the exhaustive rapidity of modern life may have had something to do with the alleged increase in the ratio in the insane ; and, by some, was advanced as a sufficient explanation of the generally entertained opinion that such increase was real, and represented the moral cost at which material prosperity had been purchased.

The condition of Ireland (with the exception of the manufacturing districts in the North) presents a striking and melancholy contrast to this picture. In the Capital and in most of the large towns, the population is rapidly decreasing, —*pari passu* with this decrease the wealth of the middle class steadily diminishes. Dickens, in one of his works, gives a vivid description of a once-fashionable quarter of London gradually declining from its position, and its houses becoming invaded and eventually monopolised by the class of lodging-house keepers. But, in this instance, the great novelist only sketched one of the minor consequences of the tide of prosperity having set to westward ; the wealthy classes were migrating to a more fashionable region. In the Irish towns, on the other hand, the most careless observer must feel that the tide of prosperity has ebbed :—the wealthy classes have not migrated, they have sunk to a lower level. In the agricultural districts the steady current of emigration has carried away those who were physically the best, the strongest, the most energetic, and adventurous of the population.

I have selected the District included in the County and City of Waterford, as presenting in its returns the condition of an agricultural district with a moderate urban population, undisturbed since 1851 in the quiet monotony of its uneventful existence. It is a fair picture of an average Irish agricultural district, the population of the city of Waterford qualifying a character that might otherwise be described as exclusively agricultural. I have taken the period between 1851 and 1868, as I am desirous of excluding the disturbing influence of the famine years (1846 and 1847) during which the number of the insane was, as might be expected, exceptionally high.

I may remind the reader that the population of Ireland, according to the census of 1851, amounted to 6,552,385. In

that year the lunatics of all classes in Ireland numbered 15,098, being in the proportion of 1 in 433 of the population. Ten years later, in 1861, the population numbered 5,764,543, a decrease of 12·20 per cent. The number of the insane then amounted to 15,947, or 1 in 361 of the population.

Now to take the District included in the County and County of the City of Waterford. It comprises an area of 721 square miles, or 461,553 acres, of which, in round numbers, 325,000 are arable, 105,000 uncultivated, 23,000 in plantations, 1,500 in towns, and nearly 6,000 under water. I may add that the population of this District in 1831 amounted to 177,054—its asylum was built in 1834 to accommodate 100 patients; it was opened in 1835, and in 1839 it contained the number of patients for which it had been designed.

The population in 1831 numbered 177,054; in 1861 it numbered 134,336, a decrease of 42,000. The asylum at present contains 210 beds, of which 170 are occupied.

In 1851 the population of the District amounted to 164,051. The numbers of the insane in the District were: In the Asylum 121; in workhouses, gaols, &c., 61; at large, unregistered, but returned by the Constabulary, 56. Total insane of the District, 238. Ratio to the population, 1 in 689.

In 1861 the population of the District amounted to 134,336. The numbers of the insane in the District were: In the asylum, 135; in workhouses, gaols, &c., 69; at large, unregistered, but returned by the Constabulary, 182. Total insane of the District, 386. Ratio to the population, 1 in 348.

In 1868 the population had, I believe, declined from the figures given in the census of 1861, but the exact numbers cannot be known until the next decennial return (for 1870). In 1868 the numbers of the insane in the District were: In the Asylum, 167; in workhouses, &c., 90; at large, unregistered, but returned by the Constabulary, 120. Total insane of the District, 377. Ratio to the population (as returned in 1861), 1 in 358.

If the returns from one District, such as I have given, can be held to afford an indication of the general state of the country (and I believe they may be so taken) I think it will be difficult to resist the conclusion that between 1851 and 1861 there was a large increase in the numbers of the insane. In 1851, with a population of, in round numbers, 164,000, we have 238 insane; and this return, be it observed, includes no unknown quantity, such as Dr. Robertson has been obliged to take into account in his estimates respecting England. In

1861, with a population of 134,000, we have 386 insane. Here with a decrease of 30,000 in the population, we have an increase of 148 insane. These figures are very significant. I have taken one county of Ireland with which I am specially well acquainted, and if the reader will compare my results with the figures furnished by the general census of Ireland for 1851 and 1861, he will perceive that the same conclusions may be arrived at for the whole kingdom as I have reached by a more minute enquiry into the returns of one of its constituent parts.

It is gratifying to be able to add that in 1868 (the number of the population being, however, unknown) this increase appears to have subsided—the number of the insane in this District has fallen to 377, and it is evident to me that the great increase last year in the number of admissions into the asylum and in the workhouses represents simply the transfer of so many insane from the lists of the Constabulary to those institutions. Instead of being at large, some who have exhibited acute symptoms have been sent to the District Asylum; (a proceeding now rendered easy by the operation of the Act 30 & 31 Vict., c. 118); others have found refuge in the workhouses. This process of transfer from the Constabulary returns has been steadily increasing for many years according as new asylums have been opened, and old ones enlarged—thus in 1861 the Constabulary returns for the whole of Ireland included 8,991 insane, &c. In 1868 they had fallen to 6,554.

To sum up: I conclude, from the foregoing statistics, that in the District I have selected for observation, insanity has largely increased from 1851 to 1861.

I am of opinion that the alleged increase of lunacy is a well established fact to far as regards Ireland from 1851 to 1861.

On Aphasia, or Loss of Speech in Cerebral Disease. By
FREDERIC BATEMAN, M.D., M.R.C.P. Lond., Physician to
the Norfolk and Norwich Hospital.

(Concluded from the *Journal of Mental Science* for January, April, and October, 1868, and January and April, 1869.)

In the first two parts of this essay I entered into the subject of the bibliography of aphasia, as illustrated by the French, German, Dutch, British, and American writers; the third part contains a detailed account of the clinical history of cases that have fallen under my own immediate observation; the fourth treats of the different forms and varieties in which loss or lesion of articulate language is met with in practice; whilst in the fifth part I have considered the subject in reference to the question of Cause, Diagnosis, Prognosis, and Treatment.

We are now, therefore, in a position to criticise the value of the different opinions which have been propounded as to the precise point of the cerebro-spinal centre which is affected in aphasia, or in other words, to consider whether there be a cerebral seat of speech at all, and if so, where it is located; and I propose in this concluding part to summarise, and carefully to weigh the evidence furnished by the numerous cases recorded in the previous pages. Leaving for the present the question of the existence or non-existence of a speech centre, and assuming *pro hac vice* that there is one, I shall proceed at once to consider the different theories which have been from time to time promulgated as to the seat of articulate language.

The ancients seemed to have possessed the most crude notions of the functions of the brain, as evidenced by Hippocrates assigning the seat of the mind to the left ventricle, and by Aristotle also placing the sensorium commune in the heart; Michael Servetus, who flourished in the sixteenth century, believed the choroid plexus was the organ destined to secrete the animal spirits, that the fourth ventricle was the seat of memory, and that the habitation of the soul was in the aqueduct of Sylvius; a century later René Descartes assigned to the soul a more secure position in the pineal gland. In later times, the brain has been universally con-

sidered to be the organ of thought and intelligence, but opinions have been and are still divided, as to whether it is to be regarded as a single organ, or as consisting of a series of distinct organs, each endowed with a special and independent function—whether, in fact, the phenomena of intelligence are due to an action of the brain as a whole, or whether the different psychological elements which constitute them are connected with isolated and circumscribed parts of the encephalon.*

Out of the last theory has arisen the principle of the localisation of the cerebral faculties, which was first announced in a definite form by Gall, who divided the encephalon into organs endowed with primordial faculties, distinct the one from the others. The germ of this idea of the polysection of the encephalon is to be found in the writings of physiologists long before the time of Gall; indeed, one writer, Charles Bonnet, assigned a special function to each fibre, stating that every faculty, sensitive, moral, or intellectual, was in the brain connected to a bundle of fibres, that every faculty had its own laws which subordinated it to other faculties, and determined its mode of action, and that not only had every faculty its fasciculus of fibres, but that every word had its own fibre!

The circumstance which directed Gall's attention to the possibility of connecting the brain with certain faculties of our mental nature is so well known that I scarcely need allude to it. In his early days, he often found himself surpassed by certain of his fellow students whom he felt were intellectually inferior to himself, but in whom a remarkable memory coincided with a striking prominence of the ocular globes. This external prominence led him to the inference that there was an internal cerebral prominence which produced it, and it was the application of this reasoning to other cranial protuberances that gave rise to his craniological doctrine.

According to Gall, the brain is composed of various parts, to each of which a special function belongs, and his system embraces the topographical determination of each of these organs. The organs of the memory of words, of the memory of persons, and of the faculty of language, he located in the

* Those who may desire more detailed information as to the various theories of the seat of speech which were in vogue before the time of Gall, I would refer to an extremely interesting series of papers now being published by Dr. Hunt in the *Anthropological Review*.

convolutions which rest on the floor of the orbit, and which form the inferior surface of the anterior lobe; the organ of the memory of persons he placed immediately above the inner angle of the orbit, that of the memory words in the convolution which rests on the posterior half of the roof of the orbit, whilst the organ of language or speech he placed in the convolution which rests on the anterior half of the orbital roof, in front of the preceding faculty.

The minute anatomy of the convolutions was unknown in the time of Gall, and he based his phrenological theories rather on the external prominences of the skull—on cranioscopy—than upon a careful study of the convolutions to which the prominences corresponded, and although his conclusions must be considered in many instances arbitrary and hypothetical, still I would say “Let not the spark be lost in the flame it has served to kindle,” for in spite of all that has been said against Gall, and all that has been written in depreciation of his labours, beyond all doubt, his researches gave an impulse to the cerebral localisation of our faculties, the effect of which is especially visible in our own days; and I look upon his work as a vast storehouse of knowledge, and as an imperishable monument to the genius and industry of one of the greatest philosophers of the present age.*

Gall's conclusions were based purely on the study of anatomy, but subsequent observers—Bouillaud, Schroeder Van Der Kolk, and Broca—have brought the light of pathological observation to shine upon this obscure subject, and, with the view of testing the soundness of the respective theories ad-

* Gall's labours would undoubtedly have met with a more hearty recognition from his contemporaries, had not the Austrian priesthood raised the cry of “materialism” as applied to his doctrines. The great German psychologist had no such heterodox notions as his adversaries maliciously attributed to him, for as Hufeland philosophically observes, “he was employed in analysing the dust of the earth of which man is formed, not the breath of life which was breathed into his nostrils.”

As in Gall's days so in ours, this very indefinite and unmeaning word “materialism” is used as a kind of psychological scare-crow to frighten all those who are endeavouring to trace the connexion between matter and mind. Surely there is nothing contrary to sound theology in assigning certain attributes or functions of an intellectual order to certain parts of our nervous centre; the cerebral localisation of our divers faculties, and the plurality of our cerebral organs, strike no blow at the great principle of the moral unity of man. The same power that caused the earth “like a spark from the incandescent mass of unformed matter, hammered from the anvil of omnipotence, to be smitten off into space” this same power, surely, could just as well ordain that a multiplicity of organs should be necessary to the full development of man's mental faculties, as that the manifestation of them should depend upon the integrity of one single organ.

vanced by these physiologists, I propose briefly to weigh the evidence which has been furnished for or against the four different theories which have, in modern times, been promulgated as to the seat of speech ; and here I would observe, that this question will never be settled by mere theoretical speculation, without the aid of that inexorable scrutiniser of facts—necroscopic examination.

I will first discuss the theory which has perhaps found the fewest advocates—that of Schroeder Van Der Kolk—who placed the seat of speech in the corpora olivaria, a theory which has lately found a warm supporter in M. Jaccoud, who thus expresses himself in reference to it :—" The functional centre of the articulation of sounds and of deglutition is situated in the medulla oblongata. It is constituted respectively by the union of the hypoglossal, the facial, the glossopharyngeal, the spinal accessory, and the trifacial nerves. For the isolated movements of the tongue, of the lips, of the cheeks, of the velum palati, and of the pharynx, each of these nerves acts independently in its sphere of distribution ; but for the complex and simultaneous movements which are necessary for the production of articulate sounds and of deglutition, all the original nuclei of these nerves are connected together, also the one side with the other, by the olfactory system, which thus becomes the co-ordinating organ of the final functional act."* A more recent writer, M. Vulpian, criticises most severely Van Der Kolk's conclusions, and quotes a case observed by himself, where, although the olfactory bodies were both manifestly diseased, yet speech remained perfectly unimpaired to the last.†

Of the sixty-five cases to which I have called attention in the preceding pages, I find that in five only the olfactory bodies were stated as having been found diseased after death. The first three cases are quoted by Van Der Kolk. In one of these, in addition to atrophy of the olfactory bodies, there was an extremely imperfect development of the frontal convolutions, and also a positively diseased condition of the anterior lobes ; in another case, although there was found grey degeneration of the right olfactory body, there was also disease of other parts, namely, in the crura cerebri, the corpus callosum, one of the thalami, the fornix, and the corpora

* Gazette Hebdomadaire de Médecine et de Chirurgie, July 22, 1864.

† Leçons sur la Physiologie générale et comparée du Système Nerveux, p. 495.

pyramidalia; in the third case I have quoted from Van Der Kolk, as well as in one from Abercrombie, in addition to the disease in the corpora olivaria, there was also disease in one of the crura cerebelli and in the tubercula mamillaria; and, lastly, in a case observed by Romberg, the affection of the corpus olivare coincided with disease in the right half of the pons Varolii. It must, therefore, be conceded, that as in all these cases, in addition to a diseased state of the olivary bodies, there was extensive disease in other parts, they cannot be looked upon as substantial evidence in favour of the localisation of speech in the corpora olivaria; in fact, Cruveilhier, who was the author of all the cases which I have quoted from Van Der Kolk's work, was quite innocent himself of drawing from them any inference as to the connexion of the olivary bodies with the articulation of words.*

The next theory for consideration is that of M. Bouillaud, who places the seat of speech in the anterior lobes, and who, twenty years ago, offered a prize of 500 francs for any well authenticated case negativing his views. Although this theory has met with less opposition than the others, several cases have been recorded which, to say the least, throw considerable doubt upon its truth. Let us see what evidence the previous pages of this essay furnish for or against the views of M. Bouillaud, who, it must be remembered, admits that speech may exist with one frontal lobe destroyed, but who maintains that when both are destroyed or seriously damaged, articulate language becomes impossible.

I have quoted three cases† in which both anterior lobes were destroyed or very extensively injured. What does a conscientious analysis of them teach us? In M. Peter's case we have seen that speech was preserved, although both frontal lobes were reduced to a pulp (*réduits en bouillie*); in one of M. Troussseau's cases, a ball had traversed the two frontal lobes at their centre, entering at one temple and making its

* Since the above was penned, my attention has been called to the latest publication on the anatomy of the medulla oblongata in this country, in which the author, Dr. Lockhart Clarke, mentions two cases of aphasia, in each of which one of the olivary bodies was diseased, being in the one case atrophied, and in the other the seat of a former clot. In both these instances there were numerous and extensive lesions in other parts of the brain, therefore—as Dr. Clarke also admits—they by no means prove that the loss of speech was due to the diseased condition of the olivary bodies.—“Researches on the Intimate Structure of the Brain.” Philosophical Transactions 1868, Pt. I., p. 312.

† *Vide Journal of Mental Science, Jan., 1868, pp. 528, 530.*

exit by the other, articulation remaining unimpaired during the six months the patient survived this fearful injury; in M. Velpeau's celebrated case a scirrhous tumour had replaced the two anterior lobes; but instead of being speechless the man was remarkably loquacious.

These three cases, to which I could add others, seem to upset M. Bouillaud's doctrine by showing that a profound lesion may exist in both anterior lobes, without impairment of articulate language; but on the other hand, it is only fair to observe that in none of them was there positive evidence of the complete destruction of the anterior lobes, for in M. Peter's case, although the lesion must have been extensive, still as the words "*cornes frontales*" are used to describe the part injured, the posterior part of the same lobes may possibly have remained unaffected; again, in M. Troussseau's case it is possible to conceive that the transit of a ball through both anterior lobes may have left a portion of the cerebral substance uninjured; in reference to M. Velpeau's barber, in reading carefully the details of the autopsy as noted in the *Bulletins de l'Académie de Médecine*, I find it stated that a portion of the right anterior lobe was not involved in the tumour, also that at the posterior, external, and inferior part of the left lobe, there was a certain thickness of cerebral substance unimpaired.

The adversaries of the localisation of speech in the anterior lobes have attached an immense importance to a case mentioned by Cruveilhier of a congenital idiot, who could pronounce words distinctly articulated, although after death it was found that there was congenital absence of the two anterior lobes. This observation has such an important bearing upon our present inquiry, that an abridgement of it must find a place here.

Alexandrine Vaillosge, a congenital idiot, came under observation at the age of twelve—the idiocy being carried to the highest degree. She could neither dress nor feed herself; although she could move her limbs in all directions she was unable to co-ordinate her movements for the act of walking, and it was necessary to carry her from place to place. The sense of smell seemed not to exist, or rather the young idiot was insensible to bad odours; the other senses presented nothing remarkable. If one threatened to strike her she would make the most frightful noises. The desire for food was readily felt, and when hungry she would express her wants by means of words *very distinctly articulated*. This girl having died at the age of fifteen of chronic diarrhoea, the following post-mortem appearances were ob-

served :—The skull was very well formed exteriorly, but its cavity was not completely filled by the brain. The anterior lobes were entirely absent, and a limpid serum contained in the cavity of the arachnoid occupied the space which separated the anterior extremity of the brain from the frontal portion of the dura mater. Strange to say, the orbital plates, although not in contact with the brain, but with serum, presented the mamillary eminences and digital impressions exactly similar to those of a healthy individual of the same age. With the exception of the absence of the anterior lobe, the left hemisphere completely filled the corresponding part of the skull; the right hemisphere, the size of which was only about half that of the left, was separated from the parietes of the skull by a space filled with serum.*

Cruveilhier himself seems to have considered this case as fatal to the doctrine of the localisation of speech in the anterior lobes ; on examining, however, carefully the beautiful plate annexed to the description of this case, it is evident that when the author stated that the two anterior lobes were wanting, he did not limit these lobes in the same way that we do now. For Cruveilhier, the anterior lobes were limited inferiorly to that part of the hemisphere which lies on the root of the orbit,† for a glance at the plate will show that only the anterior half of the left frontal lobe was destroyed, the transverse frontal convolution was preserved, as well as the posterior half of the 1st, 2nd, and 3rd frontal convolutions ; although the disease in the right hemisphere was more extensive, still the plate shows that a considerable portion of it still remained. According, therefore, to our present mode of dividing the brain, this case cannot be cited as impugning M. Bouillaud's theory.

I now pass to the consideration of the theory of M. Dax. The brain as a whole has hitherto been considered as a symmetrical organ, even by those who regarded it as an assemblage of lesser organs arranged in pairs with corresponding functions ; M. Dax, however, assigns a function to the left hemisphere, which, according to him, is not shared by the right, for he places the lesion in aphasia solely in the left

* Cruveilhier, Anatomie Pathologique, 8^e Livraison, pl. 6.

† This limitation of the anterior lobe is correct only as far as the orbital convolutions are concerned, for a glance at the plate, at the end of this essay, will show that above the orbital portion the anterior lobe extends very much further backwards.

hemisphere, without however limiting it to any part of that hemisphere.*

This is a question that can only be settled by a careful statistical research. M. Broca estimates the proportion of aphasics with lesion in the right hemisphere as 1 in 20; amongst the 63 cases I have recorded in the first three parts of this essay, in 32 only there was hemiplegia, the paralysis occurring 21 times on the right side and 7 times on the left, whilst in 4 instances the side was not stated. It will be remembered that M. Dax's paper contained 140 observations confirmatory of his view. Notwithstanding numerous and well authenticated exceptions, it must be conceded that in a vast majority of instances, loss of speech occurs in conjunction with right hemiplegia, a coincidence which may perhaps be explained on physiological grounds, as we shall see presently.

Dr. Dax's theory receives valuable support from such cases as that I have quoted as occurring in the Middlesex Hospital under Dr. Stewart, where the patient retained the power of speech after an attack of left hemiplegia, but became aphasic a few days later, on the occurrence of dextral paralysis. An analogous case has recently been published by M. Auguste Voisin, the leading features of which deserve a passing allusion, not only from its clinical importance, but from the scrupulous care with which the autopsy is described.

A female aged 55, was under the care of M. Voisin, at La Salpêtrière, for left hemiplegia of four years' duration; speech, as well as the intellectual powers, being unimpaired. One day she was suddenly seized with giddiness, followed by complete aphasia; at the expiration of four days the report states that there was no recovery of speech, but that the patient made herself understood by gesture. On the fifth day death ensued. Autopsy—The membranes are normal in appearance, and are easily removed without injury to the grey substance beneath. A large number of vessels contain calcareous plates. In the right hemisphere, the 1st, 2nd, and 3rd frontal convolutions are perfectly healthy, as also the island of Reil; on opening the lateral ventricle from above, a pulpy softening is noticed of a pale yellow

* Dr. Dax's conclusions were embodied in a communication to the medical congress held at Montpellier, in the year 1836, the title of his paper being—*Lésions de la moitié gauche de l'encéphale coincidant avec l'oubli des signes de la pensée.* In 1863 his son, Dr. G. Dax, presented a memoir to the Academy of Medicine of Paris, in which, whilst supporting the views of his father as to the seat of speech in the left hemisphere, he confined it to more narrow limits, namely, the anterior and external part of the middle lobe.

colour occupying the corpus striatum, without, however, involving its extraventricular nucleus, or extending to the grey and white substance adjoining the insula. In the left hemisphere, the 1st, 2nd, and 3rd frontal convolutions present no alteration, but not so the island of Reil, in which there is a very superficial and circumscribed softening (de 8 ou 10 millimètres de diamètre), limited to the grey matter, the subjacent white matter, as well as the extra-ventricular nucleus of the left corpus striatum, being perfectly free from disease of any kind. The neighbouring vessels are more or less infiltrated with calcareous salts, and an artery of medium calibre, destined for the nutrition of the island of Reil, is entirely obstructed by a calcareous deposit. Several portions having been submitted to microscopic examination, the following appearances were observed : 1° A large number of corpuscles of Gluge of a reddish yellow colour; 2° some crystals of hematoidine disseminated here and there, also of a decidedly reddish yellow colour; 3° a considerable number of oil globules; 4° very irregular nerve-tubes; 5° blood vessels completely discoloured, and presenting some isolated colourless corpuscles.*

M. Voisin calls attention to the fact that the interest of the above case consists in the limitation of the lesion to the grey matter of the left island of Reil, also to the complete aphasia occurring in a woman who, for four years, had been hemiplegic on the left side from softening of the right corpus striatum; he also observes that if his attention had not been called to the loss of speech, such a circumscribed lesion might well have escaped his notice, in which case this necropsy would have swelled the number of those where no anatomical lesion could be found to explain the aphasia.

Thus the arguments in favour of M. Dax may be said to be of a positive and of a negative kind, and could we stop here, M. Dax's position might be said to be impregnable; but —*audi alteram partem*—there is another side to the picture, and the partisans of M. Dax must explain away certain exceptional cases, which it seems difficult to reconcile with the truth of his views.

Several cases have been recorded in which serious disorganisation of the left anterior lobe coincided with perfect integrity of speech. I have already quoted such cases, and I can make but a cursory allusion to some others that have been brought under my notice. M. Maximin Legrand has related the history of a man who was shot in the head during the Revolution of 1848, and whose speech was

* *Gazette des Hôpitaux*, Jan. 25, 1868.

not in the least affected, although after death it was found that the left anterior lobe had been shattered by the discharge from the gun.* M. Béclard has published the case of a syphilitic patient whose speech remained unaffected to the last, although it was found that all the left hemisphere was reduced to a pulp.† One of the most uncompromising opponents of M. Dax's views is M. Lelut, whose report on M. Dax's paper gave rise to the prolonged discussion on this subject at the Academy of Medicine of Paris. After inveighing in general terms against all cerebral localisation, M. Lelut reminds the academy of a case he had published thirty years ago, of an epileptic who retained his speech in its integrity to the last moment, although his entire left hemisphere was completely disorganised.‡

There is also another class of observations which seem to me to be irreconcileable with the exclusiveness of M. Dax's unilateral theory, for there exists a certain number of carefully recorded cases, in which aphasia was one of the symptoms, although the lesion was limited to the right hemisphere. I have already cited cases of this kind in our first part, and quite recently Dr. Spender, of Bath, has published an interesting case of idiopathic abscess in the *right* hemisphere, in which during life the symptoms were epileptic convulsions in the left arm and leg, and subsequently loss of speech and left hemiplegia.

I could multiply observations of a similar character to those I have mentioned, the study of which would tend to discredit the idea of locating the faculty of speech in one side of the brain to the exclusion of the other, but enough has been said to prove two things:—

1°. That aphasia certainly is not invariably connected with lesion of the left anterior lobe of the brain.

* *Dictionnaire Encyclopédique des Sciences Médicales*, Article "Aphasie," par Jules Falret, p. 628.

† *Ibid.* p. 628.

‡ I give the leading features of this case in M. Lelut's own words. It affords another illustration of the manner in which cases are distorted to suit particular theories, for on referring to the original description as it appeared in the *Journal Hebdomadaire de Médecine*, it seems that instead of complete disorganisation of the left hemisphere, the lesion was limited to the posterior and middle lobes, and the report goes on to say that "the anterior lobes were very well developed and their convolutions had the usual proportions." In reference to the question we are now considering this is, doubtless, not the only instance in which a clinical observation has been misinterpreted according to the fancy of individual critics. M. Lelut has chosen to cite it as militating against Dax's theory; surely Bouillaud and Broca have a better right to claim it as pre-eminently tending to support their views.

2°. That the converse of this is not true also—namely, that when a positive lesion of the left anterior lobe exists, aphasia is necessarily one of the symptoms.

I now arrive at the consideration of the views of M. Broca, whose researches lead him to confine the seat of speech to a very narrow limit—the posterior part of the third frontal convolution of the left hemisphere!

However startling this assertion may be, a considerable number of observations have been recorded, which, at first sight, would seem to substantiate it, and in the previous pages I have quoted several cases published by such careful observers as Dr. Sanders, Dr. Scoresby Jackson, and Dr. Bastian, which give a general support to this exclusive doctrine.* To my mind, however—and I say it with the greatest possible respect for the distinguished surgeon of La Pitié—of all the different theories that have been advanced, this least of all will stand the test of an impartial scrutiny.

Since the publication of M. Broca's pamphlets, the attention of the profession in all parts of the world has been directed to the question of the cerebral localisation of speech, and evidence is daily accumulating of such a nature as to undermine M. Broca's position at every point. I have already quoted cases observed by MM. Charcot, Vulpian, and Troussseau, in which aphasia existed with complete integrity of the third left frontal convolution, and it would be tedious to dwell further on this kind of evidence. It has been stated by M. Broca, and repeated by M. Jules Falret and Dr. Wm. Ogle, that there is no example of the opposite condition—namely, positive lesion of the third left frontal convolution without aphasia; it will, however, be remembered that I have quoted such a case in our second part, as reported by Dr. Simpson of the Gloucester Asylum.† Therefore, we can have aphasia without disease of the third left frontal convolution, and *vice versa*.

Let us now weigh in the balance of impartial criticism the case which has served as the foundation stone upon which M.

* Since the above was written, M. Charcot has informed me that he has met with two cases of aphasia without hemiplegia, in which the only lesion found after death was obstruction from atheromatous degeneration of the branch of the middle cerebral artery which supplies the third left frontal convolution.

† Dr. Long Fox, of Bristol, has observed a case of syphilitic disease of the left frontal convolutions involving Broca's region, the power of speech being unimpaired. Lond Hosp. Reports, vol. iv., p. 350.

Broca has erected his theory. I allude, of course, to the case of Tan, the details of which I have already given. This observation has been quoted by writers in all parts of the world as a case of aphasia from lesion of the third left frontal convolution; indeed, it was the very case which resulted in the conversion of its author to the unilateral theory. Now, on referring to the description I have given of Tan's autopsy, it will be seen that in addition to the disease in the second and third left frontal convolutions, upon which M. Broca lays such stress, the following morbid conditions were also observed:—Thickening of the cranium and of the dura mater, universal infiltration of the pia mater with yellowish plastic matter of the colour of pus. The greater part of the left frontal lobe was softened, and a cavity of the size of a hen's egg was caused by the destruction of the inferior marginal convolution of the temporo-sphenoidal lobe, the convolutions of the island of Reil, and the subjacent part or extra-ventricular nucleus of the corpus striatum. It will also be observed that the weight of the encephalon was less by 14 ounces than the average weight of the brain in men of fifty years of age. As the softening, instead of being limited to Broca's region, involved the greater part of the left frontal lobe, surely it implies a breach of the laws of probability, to assume that the disease commenced in the third frontal convolution *21 years before his death*, simply because the softening was most apparent at that spot which M. Broca considers was the primary seat of mischief at the period of the clinical history during which the faculty of speech alone was abolished.

I have also formed an opinion of the value of M. Broca's theory from a consideration of cases observed by myself. Of the cases that have fallen under my own observation, a careful autopsy was made in five instances, when the frontal convolutions, being examined with great care, were invariably found healthy. The clinical history of these cases is given in the third part of this essay,* but the post mortem appearances are added in four instances only, as the subject of one of them, William Sainty, was still living at the time I wrote. I will here add that he soon afterwards died from exhaustion after another epileptiform seizure, when the following appearances were noticed after death:—Cranium somewhat thickened; dura mater much more so. Intense congestion of

* *Vide Journal of Mental Science, Oct., 1868, p. 345.*

the convex surface of hemispheres, decidedly more marked on the left side; considerable opacity of the arachnoid, also more marked on the left side. A little flattening of convex surface of left anterior lobe. In the middle of the left posterior lobe was a softening of about the size of an apricot; a similar condition existed at the same spot in the right hemisphere, but the softening was not so far advanced. The frontal convolutions were especially examined, but no trace of softening or other disease was discovered; the central ganglia, pons, and cerebellum were also healthy. There was a want of firmness in the brain generally, but no appearance of hemispheric disease elsewhere than as above stated, although various portions were submitted to a careful microscopic examination. All the arteries of the base of the brain were atheromatous; the left middle cerebral was completely filled by a fibrinous plug, and the left vertebral contained a small thin red filiform fibrinous cast, occupying only about a quarter of the diameter of the vessel. The heart weighed $11\frac{1}{2}$ ounces; the left ventricle was hypertrophied. Narrowing of mitral orifice with considerable atheroma at the base of the valve, as also at the base of one of the aortic valves. Considerable dilatation of tricuspid orifice with slight thickening of the valve itself. The weight of the encephalon, stripped of dura mater, was 47 ounces.

The advocates of M. Broca's views will charitably say that there may have been some slight disease of the frontal convolutions not patent to my means of investigation. This is an objection that may be raised against all negative cases; but granted that there may have been some slight change in the texture of the third left frontal convolution not appreciable to my senses, the whole history of this case points to the certain conclusion, that the *fons et origo mali* was in the posterior lobes, and here must have been the commencement of disease, when, four years before his death, the first and only morbid symptom showed itself in the total suspension of the faculty of articulate language.

It will be observed that I have hitherto considered this question solely from a pathological stand-point; but it seems to me that the anatomist, the physiologist, the comparative anatomist, and the anthropologist, can do us good service, and that it is to their researches, perhaps even more than to those of the clinical physician, that we are to look for the removal of the cloud which now envelops the obscure subject of the localisation of the faculty of speech.

ANATOMY—Let us first consider whether the study of the minute anatomy of the brain, and especially of the cerebral convolutions, can help the question of localisation. We may fairly assume that difference of structure implies difference in function, it is important, therefore, to ascertain whether the generally assumed symmetry of the two hemispheres is correct. There cannot be a doubt that in general form the two opposite sides of the brain are alike, or at all events, resemble each other so closely, that no essential difference can be appreciated by the naked eye. Dr. Todd, however, says that although the convolutions of opposite hemispheres in the human subject cannot be said to be absolutely unsymmetrical, yet a careful examination will shew that if the same convolutions exist on each side, they are of apparently different sizes, and not closely corresponding as regards situation; on the other hand, he says, that in the imperfectly developed brains of the idiot or young child, as well as of the inferior animals, the convolutions are quite symmetrical.*† M. Broca, who never takes anything for granted, and whose indefatigable zeal led him to examine forty brains, came to the conclusion that the convolutions are notably more numerous in the left frontal lobe than in the right, and that the converse condition exists in the occipital lobes, where the right is richer in convolutions than the left.

The comparative weight of the two hemispheres is an interesting point to note. The researches of M. Broca, made at Bicêtre and at La Salpêtrière, have shewn that although the difference of weight between the right and left hemispheres is scarcely appreciable,‡ yet the left frontal lobe is perceptibly heavier than the right; there would seem, therefore, to be a sort of compensation between the weights of the two frontal and the two occipital lobes, as we have already seen that the right occipital lobe is richer in convolutions and therefore presumably heavier than the left.

The question of the identity of minute structure in the different cerebral convolutions must now engage our attention.

* *Cyclopaedia of Anatomy and Physiology*, vol. iii., p. 696.

† Dr. Moxon considers that education is unilateral, that the brain becomes unsymmetrical in higher and more intelligent animals, and reaches its greatest want of symmetry in man, whose early life is spent in the acquirement of what he affirms to be one-sided educational developments.—*British and Foreign Medico-Chirurgical Review*, vol. 37, p. 489.

‡ According to Dr. Boyd's statistics, which are based on nearly 800 cases observed at the Marylebone Infirmary, the weight of the left hemisphere almost invariably exceeded that of the right by at least the eighth of an ounce.—*Philosophical Transactions*, 1861, vol. 151, p. 241.

M. Baillarger distinguishes six different layers of nervous substance in the convolutions, and Dr. Lockhart Clarke says that in most of them at least seven distinct and concentric layers may be distinguished. Dr. Clarke says that the other convolutions differ from those at the extremities of the posterior lobes, not only by the comparative faintness of their several layers, but also by the appearance of some of their cells; he also adds that at the extremity of these posterior lobes the cells of all the layers are small, but on proceeding forward from this point, the convolutions are found to contain a number of cells of a much larger kind; again, in the insula which overlies the extra-ventricular portion of the corpus striatum, he finds a great number of the cells are somewhat larger, and the general aspect of the tissue is rather different. M. Broca has also studied the minute structure of the cerebral convolutions, and has ascertained that the relative thickness and general disposition of the six layers recognised by M. Baillarger differ notably in the divers regions, and although his researches are not definitely terminated, he ventures to assert that the structure of the convolutions of the insula differs from that of the frontal convolutions and of the hippocampus major. I can nowhere find that any difference has been noticed in the convolutions of the two hemispheres.*

PHYSIOLOGY.—What does physiology say to Dax's theory, which has in its favour the undoubted frequency of aphasia with right hemiplegia, as compared with loss of speech as an accompaniment of sinistral paralysis? This may possibly be explained by the anatomical difference between the origin of the right and left carotids, making the supply of blood to the left side of the brain more direct than that to the opposite hemisphere, and by increasing its functional activity, thus rendering the left hemisphere more adapted for the exercise of speech.

* Since the above was written, Dr. Broadbent has kindly favoured me with a private communication in reference to his recent researches as to the course of the fibres of the brain, so far as his observations bear upon our subject. Dr. Broadbent's dissections shew that the structure of the third frontal convolution is peculiar, inasmuch as it receives fibres from a greater variety of sources than any other convolution; and he adds that although this anatomical fact does not throw any particular light on the function of the third frontal convolution, it seems to indicate that it is an important part of the hemisphere. In comparing the two sides of the brain, Dr. Broadbent has usually found the third frontal convolution larger on the left side than on the right, and in the brain of a deaf and dumb woman, he noted that this gyrus was small on both sides, and especially on the left.

It would be interesting to know what effect would be produced upon speech by cutting off the direct supply of blood from the left hemisphere. Dr. Wm. Ogle quotes a case where the left common carotid artery was tied by Mr. Lee; the patient died in two days, and in the interval between the operation and his death he was speechless.* In the Medico-Chirurgical Transactions for 1859 and 1865, are recorded four cases in which the left common carotid was tied by Mr. Nunneley of Leeds; speech was unaffected in three instances, but in the fourth, great difficulty in speaking was noticed on the sixth day. Since the publication of these cases Mr. Nunneley has tied the common carotid in two other instances, and he writes to say "in neither of these was there any difficulty in speech, either as regards the idea or the power of utterance."†

An important question for inquiry is, the frequency of the coincidence of left hemiplegia with aphasia in left-handed people. I can only find two instances of this combination; one recorded by Dr. John Ogle,‡ and the other by Dr. Hughlings Jackson.§

As a cognate question, I would ask, why are we right-handed? Is the human race right-handed by mere accident? Although there are a few left-handed people in the world, the immense majority of persons use the right hand for every mechanical act. Is this a question of education or of mere imitation? If we concede this, we must admit that our ancestors in remote ages must have been influenced by some cause connected with the organization itself; if it were a mere chance that had determined the choice of the right hand, we should find some left-handed races in certain parts of the world, which, I believe I am right in stating, is not the case. Besides, this question may be set at rest, says M. Broca, by the consideration "that notwithstanding all their efforts to counteract it, there are left-handed people, who remain left-handed, and one must, in their case, admit the existence of an inverse

* St. George's Hospital Reports, 1867, p. 111.

† On looking over the published cases of ligature of the common carotid artery, I find that one of the earliest instances is one where the left common carotid was tied in 1815, by Mr. Dalrymple, the well known Surgeon of the Norfolk and Norwich Hospital, for aneurism by anastomosis of the left orbit. In this case speech seems not have been affected, for it is stated that "a few minutes after the patient was placed in bed, she declared that her head no longer felt like her old head, as the noise by which she had been so long tormented had now ceased."—Medico-Chirurgical Transactions, 1815, v. 6.

‡ Lancet, March 21, 1868.

§ Medical Times, Jan. 27, 1866.

organic predisposition, against which imitation, and even education, cannot prevail.”*

The study of Embryology may assist us here. An eminent foreign physiologist, Gratiolet, says that in the development of the brain, the frontal convolutions of the left hemisphere are in advance of those of the right, and that the left are already properly figured, whilst the right are not yet even visible. Thus according to Gratiolet the left hemisphere, which holds in its dependence the movements of the right limbs, is more precocious in its development than the opposite hemisphere, and thus the young child uses by preference the limbs of which the innervation is the most complete, or in other words he becomes right-handed. From the cause which thus makes us use the left hemisphere for mechanical acts, may arise the circumstance of our using it in preference for speech, and we thus become left-brained—*gauchers du cerveau*—to use M. Broca’s expression. But is this theory of the early development of the left frontal convolutions true? Gratiolet says it is; Carl Vogt, an equal authority, denies it. This is an extremely interesting and important question about which very few are in a position to give a valid opinion, and I regret I can quote no British authority in reference to it.

COMPARATIVE ANATOMY.—Does the study of Comparative Anatomy throw any light upon our subject? Here we must inquire whether language be the exclusive prerogative of man? Some would answer this question in the negative, and M. Lemoine, in the work to which I have already alluded, devotes a chapter to *Le Langage des Bêtes*.† Max Müller, speaking of this subject, says, “Speech is a specific faculty of man. It distinguishes him from all other creatures; and if we wish to acquire more definite ideas as to the real nature of human speech, all we can do is to compare man with those animals that seem to come nearest to him, and thus try to

* At the discussion on aphasia which took place at the Norwich meeting of the British Association, Professor Broca alluded to the circumstance that all birds perched on the right leg: Dr. Crisp, on the other hand, said that this peculiarity was confined to Grallæ, and he believed it was a question of equilibrium, and that the bird was compelled to take this position from the greater weight of the liver.

† A distinguished French anthropologist, M. Coudereau, says that articulate language in man is neither an innate nor an exclusive faculty; that man acquires the faculty of speech by his memory, labour, and imitation—the parrot does no more; that from a linguistic stand-point, this faculty is in its nature identical in man and animal.

discover what he shares in common with these animals, and what is peculiar to him, and to him alone." Further on he says, "Language is something more palpable than a fold of the brain or an angle of the skull; it is the one great barrier between the brute and man; it admits of no cavilling, and no process of natural selection will ever distil significant words out of the notes of birds or the cries of beasts. Language is our Rubicon and no brute will dare to pass it." Without entering into the question of whether the means of communicating with each other undoubtedly possessed by brutes be entitled to the appellation of a language or not, it cannot be denied that one of the great distinctions between man and animals is the possession of articulate language. One of the differences between man and the more intelligent animals is in the degree of development of the cerebral convolutions, which, moreover, exist only in the class Mammalia; and according to Flourens, the Rodentia, the least intelligent of the Mammalia, have no convolutions; the Ruminantia, more intelligent than the Rodentia, have convolutions; the Pachydermata, who are still more intelligent than the Ruminantia, possess still more convolutions, and so on the number continues to increase as we ascend to the Carnivora, then to the Apes, the Orangs, and lastly to Man, who is the richest of all animals in cerebral convolutions. If this gradation in the number of the convolutions has a relation to the intelligence of the animals, it would seem to give an *a priori* reason for concluding that the highest product of intelligence—speech—may well have some connection with the development of the convolutional grey matter.

Let us consider for one moment the comparison which Carl Vogt makes between our quadrumanous cousins and ourselves. According to this distinguished naturalist, the Apes have an extremely imperfect development of the third frontal convolution, and the same condition exists in the Microcephali; therefore, he says, as neither Apes nor Microcephali can speak, Comparative Anatomy gives a subsidiary support to the theory which places speech in this convolution. Professor Vogt's views seem to me of such great importance, and so extremely pertinent to our subject, that I shall give them in his own words.

The brain of Man and that of Apes, especially of the anthropoid apes (Orang, Chimpanzee, Gorilla), are constructed absolutely upon the same type—a type by itself—and which is characterised, amongst

other things, by the fissure of Sylvius and by the manner in which the island of Reil is formed and covered; but there are secondary differences in the arrangement of the folds, in the comparative development of the lobes and of the convolutions. One of the principal characters is, that in the brain of all the human races, without exception, the frontal lobe, by its posterior and inferior part (that is in Broca's region) touches the temporo-sphenoidal lobe, so as to give the fissure of Sylvius with its two branches, the appearance of a double-pronged fork; whilst in the Apes, Broca's convolution is separated from the temporo-sphenoidal lobe by the lower end of the transverse frontal and transverse parietal convolutions; in other words, in Man, the third frontal convolution is extraordinarily developed and covers partly the insula, whilst the transverse central convolutions are of much less importance; in the Ape, on the other hand, the third frontal convolution is but slightly developed, whilst the central transverse convolutions are very large, descending quite to the edge of the hemisphere, and giving to the fissure of Sylvius the form of a V. The cause of this difference dates from the period of embryonic development:—the brain of the foetus of any of the Mammalia at a certain age (two months in Man), has the form of a bean with a large infero-lateral sinus corresponding to the insula and the surrounding parts. From the third to the fifth month, this large space becomes covered in Man by the *very rapid* growth of the third frontal convolution, and by the *slow* growth of the transverse central convolutions; whilst in the Ape, it is just the reverse, the space is filled by the *rapid* growth of the transverse central convolutions, and by the *slow* growth of the third frontal convolution. To shew the bearing all this has upon the seat of speech, I would refer to the Microcephali who do not speak—they learn to repeat certain words like parrots, but they have no articulate language. Now, the Microcephali have the same conformation of the third frontal convolution and of the central folds as Apes—they are Apes as far as the anterior portion of their brain is concerned, and especially as far as regards the environs of the fissure of Sylvius. Thus, Man speaks; Apes and Microcephali do not speak; certain observations have been recorded which seem to place language in the part which is developed in man and contracted in the Microcephali and the Ape; comparative anatomy, therefore, comes in aid of M. Broca's doctrine.*

I have reason to believe that these views of Professor Vogt are not very generally known in this country, and I

* The above is an extract from an autograph letter with which Professor Vogt has favoured me. In this communication he expresses a doubt whether we shall ever be able satisfactorily to assign "the divers functions" which compose language, to special parts of the brain, until we have a physiological analysis of articulate language, similar to that which Helmholtz has given of sight and hearing.

need hardly allude to the extremely important bearing they have upon the question at issue. With the view of obtaining some confirmation of the statement of the arrest of development in the third frontal convolution of the microcephali, I have consulted Mr. Marshall's extremely interesting paper in the Philosophical Transactions for the year 1864, in which he gives a detailed description of the frontal convolutions of a microcephalic woman and boy, neither of whom possessed the power of articulation. In both these brains the frontal convolutions are described as being singularly short and defective as compared with their wonderfully tortuous and complex character in the perfect brain; in fact, Mr. Marshall adds that they were far more simple than in the orang's or the chimpanzee's brain. In only one of these microcephalic brains, however, was the want of development most apparent in the third frontal convolution. Further investigations would, therefore, seem necessary before admitting with Carl Vogt that the conformation of the microcephalic brain gives a direct support to the localisation of speech in the third left frontal convolution.

As far back as 1827, M. Bouillaud instituted a series of experiments upon animals, with the view of determining the functions of the brain, and on several occasions he removed different portions of the cerebral lobes, without impairing sight or hearing; he also removed the entire hemispheres from a chicken, in whom the power of expressing pain by its peculiar cry was retained.* On one occasion he pierced with a gimlet the anterior part of the brain of a dog, from side to side, at a spot corresponding to the union of the anterior with the middle lobes—that is in the immediate neighbourhood of Broca's region. The dog survived the mutilation, but was much less intelligent than before the operation, and although he could utter cries of pain, he had entirely lost the power of barking.† As far as the present inquiry is concerned, I am aware that but little importance can be attached to these experiments, for there is little or no analogy between the cry of a chicken or the bark of a dog, and the articulate speech of man; still, experiments of this kind may have an indirect bearing upon our subject, and it would be extremely

* *Recherches expérimentales sur les fonctions du cerveau.* Journal de Physiologie, tom. x., p. 49.

† *Ibid.* p. 85.

interesting to know what would be the effect of traumatic injury to certain regions of the anterior lobes upon the quasi-articulatory powers of the parrot.

I think that much valuable information in reference to the seat of speech may be elicited from a more careful study of the affinities and differences between the brain of man and that of animals; but this study, surely, should not be confined to the convex surface, or even to the anterior half of the hemisphere. Professor Rolleston, in a most interesting paper, has called attention to other points of difference between the brain of man and that of apes, and he attaches a great physiological value to the presence or absence of the "*bridging convolutions*," which more or less fill up the space known as the external perpendicular fissure, which separates the occipital from the parietal lobe.*

Professor Owen mentions the superior development of the hippocampus minor, as a point of distinction between man and the lower animals. According to him, in the inferior mammalia the posterior cornu of the lateral ventricle is capacious and simple, whereas in the chimpanzee and gorilla the growing walls begin to be reduced by the encroachment of a protuberance, which in the archencephala is developed into the hippocampus minor.† It will be remembered that it was in this lesser hippocampus that Dr. Barlow formerly located the faculty of speech.

ANTHROPOLOGY. The comparative facility of speech in different races of mankind is an interesting point to notice, and it is much to be regretted that we possess so little authentic information upon the subject.

Gratiolet has established three principal divisions of our species under the names of Frontal or Caucasian, Parietal, and Occipital or Ethiopic. He has shown that in the Caucasian the anterior fontanelle is the last to ossify, in order to permit of the greatest possible development to the frontal lobes; and that in the Ethiopic race the converse condition exists, the posterior fontanelle being the last to ossify. According to this arrangement, in the superior races the frontal lobes of the hemispheres continue to develop them-

* Medical Times, Feb. 22nd and March 15th, 1862. There are many other points in Dr. Rolleston's paper which, although having no direct bearing upon speech, afford a collateral aid to that subject, and it is impossible to overrate the value of the talented Oxford Professor's researches in this direction.

† Comparative Anatomy and Physiology of the Vertebrates, vol. iii., p. 138.

selves for a long time after the occlusion of the posterior sutures has put an end to the growth of the rest of the brain; in the inferior races, on the contrary, the ossification of the sutures proceeds from before backwards, and thus the anterior parts of the brain are first arrested in their growth.

Of course, the above arrangement only tends to prove that the development of the higher faculties of the intellect is in relation with the development of the anterior region of the skull; * it has, however, an indirect connection with the power of speech—the greatest of all man's mental attributes.

Having now considered the subject of speech, its loss, and its localisation, in all its various phases and aspects, I would observe that I am aware that my remarks may be said to be of an iconoclastic character. I may be told that I have set up the authors of the four popular theories for the mere pleasure of knocking them down again, without substituting any theory of my own in their place.

In reference to these doctrines, the truth and value of which I have called in question, it is no fault of mine if the pedestals upon which they stand are rotten. In lieu of offering any hypothesis myself as to where the cerebral centre for speech may be, I would ask, is it certain that there is a cerebral centre for speech at all? When we talk of the "*faculty of speech,*" have we any very clear and definite notions as to what we mean? † May not speech be one of those attributes, the comprehension of which is beyond the limits of our finite minds? Does the loss of it necessarily imply organic lesion of structure? If it were so, how can we account for the instances I have quoted, in which the restoration of the power of speech was due to the effect of a severe mental shock? ‡ The brilliant experiments of Dr. Richardson, of freezing the cerebrum of animals—which it has been my privilege to witness—conclusively show that various cerebral functions may be temporarily but completely suspended, without leaving

* With the view of verifying the accuracy of this statement, M. Broca examined the heads of thirty-two house-surgeons who had successively resided at Bicêtre during the years 1861—1862, and compared their dimensions with those of the heads of twenty-four porters attached to the various wards of the same hospital. This comparison resulted in the confirmation of the generally received opinion, that the anterior lobes are the seat of the highest order of intellectual faculties.

† Dr. Maudsley denies the existence of a speech faculty, and says, "There is no more a special faculty of speech in the mind than there is a special faculty of dancing, or of writing, or of gesticulating."

‡ *Vide Journal of Mental Science, for April, 1869, p. 117.*

ny trace of organic mischief; and I confidently predict that the question of the localisation of our different faculties is destined to receive considerable elucidation from Dr. Richardson's valuable researches.

It has occurred to me to inquire whether during the anaesthesia produced by the inhalation of chloroform, there is any altered structural state of the cerebral tissue, which would be patent to our senses, supposing we were in a condition to make the necessary examination. From experiments lately made in Paris by Dr. Ferraud, it would seem that the action of chloroform on the cerebral nerve tissue is direct by means of the olfactory nerves, and that the production of the anaesthetic condition does not necessitate the passage of the drug into the arterial system by means of the pulmonary mucous membrane.*

May not loss or lesion of speech depend on some altered state of the cerebral tissue not appreciable to the sense of vision—to the eye—for microscopic examination is only the aided eye? Without doubt, there may be changes going on in nerve tissue which escape our means of investigation, and I am supported in this view by one of the greatest continental histologists, who, in conversing with me about softening of the brain, said that he believed there were changes of structure not revealed by the microscope, but which were patent to the sense of touch. I find that Dr. Sankey is of the same opinion, for he thinks the altered specific gravity of the brain in old people indicates that the nerve tissue has undergone some change of structure which the microscope has not yet made palpable to our vision.†

The fact of the occasional benefit obtained from the use of electricity in impaired speech, as observed by Dr. Maracet and others, would lead to the inference that the defect may depend in some instances upon an altered electrical condition.

* I am aware that the above conclusions are disputed by other physiologists (MM. Dieulafoy and Krishaber). M. Ferraud's experiments, however, seem to me to be conclusive; having opened the trachea in rabbits, he introduced a tube, and then divided the trachea above; a small cupping glass, containing a sponge imbibed with chloroform, was then placed over the nose of the rabbit; in three minutes the anaesthetic condition was produced, and maintained as long as the olfactory apparatus was submitted to the action of chloroform. When the same animal was chloroformed by means of the tracheal tube and the respiratory apparatus, anaesthesia was produced a little sooner (*i.e.*, by 15 seconds) than when the anaesthetic was administered by the olfactory apparatus. *Gazette des Hôpitaux*, May 29, 1869.

† On the state of the Small Arteries and Capillaries in Mental Disease. *Journ. Ment. Science*, Jan., 1869.

"It may be," says Dr. Beale, "that each little brain cell, with its connected fibres, in some way resembles a minute voltaic battery with its wires; the matter of which the cell is composed undergoing chemical change, in the course of which slight electrical currents are developed; these being transmitted by the fibres ramifying to different parts, exert an influence upon tissues and organs amongst which they ramify."*

May not some thermal change, the result of chemical action, interfere with the exercise of speech? Here I would observe that although we are living in an age when organic chemistry is vastly increasing our knowledge of the essential nature of disease, writers on disorders of the nervous system have paid but little attention to the chemical pathology of the brain, although Dr. Adam Addison has paved the way for more extensive researches on this subject by his extremely interesting and highly original paper in the *Journal of Mental Science* for July, 1866, in which he very justly says he is treading on a field which is a *terra incognita* of unknown extent. The result of Dr. Addison's observations—which are all the more valuable because they are controlled by comparison with those of Bibra, L'Héritier, Schlossberger and others—are as follows:—

- 1°. That the different anatomical parts of one and the same brain present great differences in their quantities of water and fat.
- 2°. That the grey substance is far poorer in fat than the white.
- 3°. That the quantity of matters soluble in ether, stands in an inverse relation to the quantity of water.
- 4°. That the quantities of phosphorus do not have a parallel connexion with the degree of intelligence.
- 5°. That in three cases of hemiplegia the average quantity of fat in the corpus striatum, optic thalamus, and grey substance of the hemisphere opposite the paralysis, was less than the average quantity in the same parts of the other side.

I trust that Dr. Addison may be induced to supplement his most useful essay by a special chemical analysis of those particular portions of the brain in which the seat of speech has been severally placed by the various authors who have written upon the subject.

* Lectures on the Germinal or Living Matter of Living Beings. *Medical Times*, July 10, 1869.

Practitioners of the healing art are no longer divided, as in the good old days of yore, into solidists and humorists, and I am inclined to think that in our over anxiety to connect every disorder, in some way or other, with structural lesion, we are apt to overlook the condition of the fluids of the body, and in corroboration of this view I would refer to the recorded cases of loss of speech from the effect of certain drugs such as Stramonium, Belladonna, also from the introduction into the lymphatic system of a poison from the bite of a snake. Possibly the discovery of the perivascular canals of His, and of the existence of miliary aneurisms in the minute arteries of the brain, may serve as an element for a better understanding of certain functional disturbances of that organ.*

In bringing this long dissertation to a close, I wish to add that I am painfully sensible of the great disproportion which exists between the demands of this important subject, and the capacity of the person who has undertaken to deal with it, and my own sense of inadequacy is enhanced by the consideration, that although one of the most learned scientific bodies in the world devoted the long period of two months to its elucidation, the discussion in the Academy of Medicine of Paris terminated without a solution of the difficulties which its members had attempted to grapple with.

No subject of late years has so occupied the attention of physiologists in all parts of the world, as the attempt to localise the grand attribute of humanity, the faculty of speech; but, I am bound to say that in spite of all that has been written in reference to it, the question must still be considered as *sub judice*, and an impartial sifting of the mass of evidence I have accumulated has led me to the following conclusions:—

1°—That although something may be said in favour of each of the popular theories of the localisation of speech; still, so many exceptions to each of them have been recorded, that they will none of them bear the test of a disinterested and impartial scrutiny.

2°—That I by no means consider it proved that there is a cerebral centre for speech at all, and I would venture to

* In the elaborate paper by Dr. Sankey, to which I have already referred, is the following passage corroborative of these views:—"Each act of cerebration (which results from an action of the blood and the cerebral tissue) requires that the blood be unimpaired in quality, and of a just quantity; blood impaired as to quality produces imperfect cerebration as proved by the injection of poisons into the blood, by the action of certain drugs which are known to enter the circulation."

suggest that speech, like the soul, may be something, the comprehension of which is beyond the limits of our finite minds.

I have heard it said in reference to this inquiry, *cui bono?* What good purpose is served by the numerous and extensive researches which have been, and are still being, made to decide whether we have, or have not, a portion of our cerebral substance, to which belongs the exclusive prerogative of presiding over articulate language? Now to this objection I would apply the trite remark that all knowledge is power; besides, surely no subject is more worthy of the careful investigation of all labourers in the field of science than the origin of speech; it is one of the questions in which the physiologist and the student of language meet, and now that the sluice-gates of public opinion are opened upon it, error will be swept away, and a fresh impulse be given to the study of the mind. Moreover, the scientific result of the recent researches about the seat of speech, need not necessarily be limited to the acquisition of a better knowledge of the conditions under which that faculty is developed or lost, for since the attention of the profession has been directed to the investigation of the causes which interfere with the exercise of speech, a new flood of light has been thrown upon the minute anatomy and physiology of the nervous centres, which may eventually lead to the localisation of our other faculties.

The definite solution of the question I have been discussing has been retarded by the fact that authors, in many instances, have written with pre-conceived notions, and their works bear the impress of a desire to prove one theory as against another, rather than to place on record facts which may, as it were, speak for themselves. Some not wishing to leave the scientific rut in which they have so long moved, content themselves with boldly asserting that this or that theory cannot be—that it is contrary to common sense, and is the annihilation of all traditional scientific data. Others decline to discuss the unilateral theory, on the ground that it is impossible that a perfectly symmetrical organ like the brain should possess a property in one hemisphere not appertaining to the other. Now the question is not so much how it is, but if it is. In an inquiry of this kind we must dismiss all pre-conceived opinions and notions, and if physiological experiments well made, if rigorous pathological observations confirmed by necroscopic verification, should happen to furnish a number

of facts sufficiently significant to establish an evident relation between certain functional alterations of speech, and the lesion of certain definite parts of the encephalon; in that case, all conjectural propositions, and all bold assertions, must vanish before the light of scientific truth.

It is in the spirit of the above remarks that I have endeavoured to approach this inquiry, and if in my attempt to unravel the difficulties with which this subject is surrounded, I have only succeeded in making "confusion worse confounded," I would say with Heberden—"Fateor equidem ea esse rudia, inchoata, et manca; cuius rei culpa, ut maximam partem in me recidat, partim tamen in ipsius artis conditionem erit rejicienda."

Reply to the three questions of the Committee of the English Medico-Psychological Association as to the reforms to be introduced into the examination of the Insane in Courts of Justice. By MONS. BRIERRE DE BOISMONT. Translated by DR. G. MACKENZIE BACON.

First Argument of the Committee.—On the mistake of those who think that the persistence of the reasoning power, the knowledge of good and evil, and of right and wrong in the insane, involves their responsibility for their criminal acts.

The legal criterion of the responsibility of the insane, founded on their knowledge of right and wrong, and of good and evil, is a consequence of the old dogmata of the lawyers who had no practical acquaintance with insanity. Matthew Hale, who has exercised, and still does, a great influence on the proceedings in the English and American law courts,* only admits the plea of insanity in general insanity, and declares that partial insanity is similar to the mental condition of a child of fourteen, who knows that he ought to be punished if he does wrong.

If such an opinion were adopted, three-fourths of the insane in asylums would be held responsible for their acts and convicted.

There is no longer any doubt in the present day, even with many who have no knowledge of insanity, that the insane can

* American Journal of Insanity, January, 1867. See the two causes: *Regina v. Southey*, Maidstone, Crown Court, before Justice Mellor; and *Regina v. Leigh*, Lewes, Crown Court, before Justice Erle.

reason and have correct notions on right and wrong, good and evil, though they may still remain the subjects of disease.

Legal writers who have not lived with the insane, think they have a triumphant refutation of the irresponsibility of the partially insane, because they have seen and heard some of them speak and act reasonably for several hours, often, indeed, longer, write very sensible letters, and possess a sense of right and wrong. The preservation of the power of reasoning among the insane is not more surprising than is the normal performance of the functions of the stomach and other organs in the midst of serious disease. There are, in fact, pathological states, with intervals and remissions, during which the physiological action is maintained and re-appears, although the disease may be latent and even progressive. We were present at the Hotel Dieu, in Paris (in Magendie's practice), at the autopsy of a woman who had taken her food up to the last day of her life, without any apparent disorder of the digestive functions. The stomach, however, was almost entirely reduced to a gelatiniform layer, with the exception of the pylorus, by a cancerous disease, of which the physician and clinical clerks had not the least idea. This is what Lord Erskine, since 1800, said, while pleading for Hadfield. "The insane persons, who have appeared before the court at Westminster, have not only given proof of memory, shown a knowledge of, and the most perfect recollection of their mutual relations to one another, of their acts and the events of their life, but they have still more been generally remarkable for their acuteness and *finesse*. Their reasoning has been seldom at fault. Their malady consisted in delusions, the deductions from which, derived from their mental disorder, were based on an irrepressible belief in the reality of their diseased impressions."*

The founder of legal medicine, Paul Zacchias, who had proved the persistence of reasoning power in the insane, nevertheless wrote of them in the 16th century, in his medico-legal questions. "By rights, those who are affected with melancholy delirium, (monomania) ought to be, like all the insane, deprived of the conduct of affairs which demand the integrity of the intellect, because, though not at first speaking unreasonably on a subject, they are apt to wander from time to time in matters in which they seem to conduct

* Bucknill—"Unsoundness of mind in relation to criminal acts," p. 40, London, 1854.

themselves prudently.”* This opinion was also that of the illustrious Chancellor of Aguesseau. “Let us examine, he says, “the case of those who have delusions on only one or two leading points. One is always seeing princesses, another thinks he is going to be arrested, another is transformed into an animal, another, more decidedly mad, even considers himself the Almighty. Unless questioned on these topics they appear sane, but bring them to the particular point and they betray themselves directly. Who can think that such madmen could make a will?”† (d’Aguesseau—œuvres completes). The power of reasoning then exists among the insane. How could it be otherwise, for it shows itself very early in man. The celebrated physiologist Schreder van der Kolk observed it as early as the third month. But this faculty, born with the individual, will last as long as the function preserves its own vitality.

It is because the insane retain the power of reasoning that they can distinguish right from wrong, and good from evil, since they only differ from others by their inability to control the injured part, or, if they are conscious of their delirious conceptions, by their being unable to command their will. Without reasoning power, and knowledge of good and evil, no asylum could possibly exist. This proposition is admitted by all alienists. The responsibility of those for whom the plea of insanity was raised in criminal cases was first discussed at a meeting of lawyers, after the English (Royal) Commission, formed in 1865, to consider the question of capital punishment. It could not be otherwise, for murder was often the cause of such trials, and it was imperative to hear the opinion of alienist physicians on this point. Dr. Harrington Tuke, when questioned on this subject, replied in his evidence, that 54 asylum physicians, of great experience, concerned at the English judges persisting in making the responsibility of the insane depend on their knowledge of right and wrong, had combined to combat this doctrine. They unanimously agreed on the following declaration: “The belief in the responsibility of the insane, based on their appreciation of right and wrong, is irreconcileable with facts

* Pauli Zacchias Questionum medico-legalium, tomus tres olim aucti a Z. Daniel Horstio nunc a Georgio Franco, med., Francofurti ad moenum, 1688, Vide Demens, Dementia, Insania.

† A. Brierre de Boismont, Etat des facultés dans les délires partiels en monomanie. (“Annal d hyg. et de Méd. Lég. t. 50, 1853, see also t. 49, De la Monomanie ou délire partiel au point de Vue Médico-Légal,” p. 381, 1853.)

known to all the physicians, because it is clear that this appreciation often exists in individuals whose insanity is undoubted, and it is even observed together with insane ideas, and those of a dangerous and impulsive character."

The Committee formed by the Society of German Alienists to discuss, in 1865, at Hildersheim, questions relating to legal medicine, and composed of MM. Flemming, Roller, Solbrig, Jessen, and Laehr, came to conclusions similar to those of the 54 English physicians.

This doctrine, energetically maintained by the celebrated jurist, Mittermaier, was also put forward by Griesinger, in the second edition of his treatise on mental diseases, and we may add that it is also that of nearly the entire body of French alienists. As showing how little weight should be attached to the appreciation of right and wrong, Mittermaier relates the case of an assassin that he went to see at the asylum. This man had killed his father, and to the question of the jurist, "Do you not know that parricide is a crime that is very severely punished?" he replied, "I know it very well, but God having sent me into the world to punish great sinners, of whom my father was one, I have killed him according to the divine command."

The American Journal of Insanity, April, 1867, gives an account of a patient named McGregor, a half imbecile, who had killed his father, because, as he stated in his examination, he had planned it for a year past, in consequence of a quarrel they had had about a bottle of whiskey. "On the evening of the murder," he observed, "I lay down with all my clothes on, waiting till my father had got to sleep, because, as he was the stronger, he might have killed me, and this is the reason I ran away when he seized my hatchet. I was sorry for what I had done from a dread of going to prison and of being hung. I know that my act is a bad one, contrary to law, and forbidden by the Bible, but it was always my intention to revenge myself because of the whiskey which he accused me of drinking, and of my wood which he had burnt, when he came to the house." McGregor's weakness of intellect having been recognized, he was condemned to be detained for the rest of his life in the criminal asylum attached to the prison at Auburn.

One of our private patients who had made several attempts to do us an injury, under the idea that we were persecuting him, said to us one day: "I know that if I had killed you elsewhere it would have caused me to be transported, but here

I have been declared insane, and a madman is not responsible for his actions. If I do not effect my purpose it is because my courage fails." This patient had been placed in an asylum because he had tried to kill the farmers who, he thought, poisoned his wheat!

These three lunatics had proper notions of right and wrong, and good and evil.

A trial, which took place in North America, shows to what this erroneous opinion as to the value of the persistence of the reasoning power may lead. A certain Palton was accused of murder. After the evidence had been given, the counsel rose to plead insanity for his client, but the latter protested vehemently against this line of defence. This incident left him to himself and to the decision of the jury. The court adopted the views of the accused and found him guilty. Happily the supreme court quashed the judgment which was based on the legal presumption of the existence of reasoning power till the contrary was proved, a theory always admitted by English Judges. One of the arguments of the judgment was to the effect that this presumption could not rest on the declaration of the accused, that from the moment the defence had pleaded insanity it was impossible to remove the proof of it from the jurors, who alone could decide whether there was insanity or not. Palton was secluded as insane.* Mittermaier proves that several of these patients employ these ideas of right and wrong for their own safety and that of their fellows, by urgently demanding their admission into an asylum for fear of killing themselves or doing injury to others. There are, he says, some of these lunatics who reason so well, that it is only after a certain time that their mental affection is recognized by medical men.†

There is no doubt, then, that reasoning power, ideas of right and wrong, and good and evil exist among the insane, who none the less retain their delusions, hallucinations and impulses; with this knowledge we can neither treat nor direct them, but even then inquiry into their antecedents and daily observation of them prevents us admitting that they are responsible for their actions.

Second Argument of the Committee.—The impossibility of

* Wharton and Stillé, "Traité de jurisprudence médicale," 2nd edition, p. 27, Philadelphia, 1860.

† Mittermaier—"Nouvelles recherches et appréciations psychiatriques pour juger la question de responsabilité dans les crimes commis par des aliénés accusés." (Friedreich's Blätter für Gerichtliche Medicin.)

the jury deciding with a knowledge of the causes, either in criminal or civil cases, on the acts committed by the insane, their state being always connected with a physical and moral malady. Hence the necessity, in these cases, of a medico-legal report.

It cannot be denied, and the preceding facts go to prove, that the medical specialist is alone capable of fulfilling the functions of an expert in the case of the insane. Who, indeed, but he could discuss a malady, beginning in an insidious way, often of some duration, and whose development, more or less variable, presents intermissions, remissions, lucid intervals, appearances of delusive recovery, rapid changes in its character often extremely difficult of diagnosis, such as are seen in moral insanity or that of a temporary or epileptic nature?

Mittermaier quotes the story of the learned Dr. Jacobi, director of the Siegburg Asylum, Prussia, who, when engaged to examine Reiner Stockhausen, who was accused of theft and suspected of simulating insanity, declared, after several months' observation, that he was afraid to give an opinion; later, that the accused feigned insanity, and later still, that he was deceived himself and the accused was really mad!*

Mittermaier, who made himself acquainted with the insane by 40 years' investigation, gave his decided opinion in favour of the intervention of the alienist physician in the legal questions relating to his subject, but recommended him not to go out of his line, and to reply to all captious questions unconnected with his work.—I know nothing of that! He also lays down the rules that physicians should follow in a medico-legal inquiry. To form a correct judgment on the existence of insanity, it is necessary, he says, “1st, to search for the indications of a change in the ordinary disposition of the character of the accused; 2nd, to discover the physical and mental symptoms of the complaint; 3rd, to point out the causes which have acted on the brain; 4th, to show very carefully the manner in which the mental affection has manifested itself, either by depression or exaltation, the knowledge of one or other of these states enabling us to estimate the mental condition.” The observation of the moral part of the man is too much sacrificed now-a-days to physical and chemical analyses. It is well, however, as M. A. Latores lately remarked in one of his *causeries*, that the *homo duplex*

* “Laurent, Étude médico-légale sur la simulation de la folie,” p. 21, 1865.

should be regarded under his two aspects. The problem of man, medically speaking, is not limited to a description of the cell; the programme of medicine is more extensive and elevated than chemists and mechanicians imagine, and the part that medicine has to play is not exclusively confined to the test glass and re-agents. (*Union Médicale*, Feb. 8th, 1869). It is because these opinions have always been held by us, although we gave credit to the remarkable works of modern individuality, that we shall, with God's help, entitle the studies of our life the symptoms of madness. The four signs put forward by Mittermaier as proofs of insanity, enable him to show how the morbid affection has acted on the intellect, the emotions, and the will; in this manner we succeed in showing the influence which the mental derangement has exerted at the time of the perpetration of the crime and the symptoms which strengthen this opinion. It is no less important to consider the reasons which allow us to suppose that the crime was the last symptom of the malady, of the arrest which often follows its accomplishment, and of the more or less important remissions which occur, according to the nature of the malady.

We must also not disregard the influence of heredity, of predisposition, of certain morbid affections, of the continuous influence of delusions on the conversation and actions. Another equally useful consideration is this, that when society accuses a man of a crime, it must take him as he is, and not forget that the limits between health and disease are not fixed. We should also bear in mind that morbid conditions which have existed for a greater or less time may show themselves spontaneously or under the influence of certain accidents, and that the physical state may act on the mental, and produce mental disorders. (See *Griesinger*, 2nd edition, German, p. 61).

It will readily appear, even from this rapid enumeration, how much special knowledge a medico-legal examination requires—and we are only now concerned with well known types of insanity—but the matters in dispute have not always the same evidence. However extensive may be the experience of an alienist, great difficulties will often arise. There are patients who conceal their delusions, and protest against the mental affection attributed to them. Nothing is more common than to see lunatics profess not to believe in their false ideas, even when this very reason (*i.e.* their lunacy), would remove them from the clutches of the law.

We have already quoted the case of the American assassin, Falton, who got himself condemned by insisting that he was not mad.

M. Dagonet has related the case of an epileptic, who, when his counsel was urging for him the plea of insanity, opposed him so strongly that the judge and jury found him guilty and condemned him to several years' imprisonment. A few days after the sentence, he was obliged to be removed to the Stephansfeld Asylum, of which M. Dagonet was then chief physician, to be treated for his mental affection.*

It is not uncommon to hear lunatics accusing themselves of crimes which they have not committed. Forbes Winslow has given, in his journal, the case of a merchant who insisted that he had killed a person, and with such force that he was put in prison. There was some uncertainty as to what should be done, when some one, who had been formerly in his service, gave evidence of the weakness of the man's mind, and the impossibility of the murder; in fact the pretended victim was found to be in very good health. It is stated in the 8th edition of the complete manual of legal medicine by MM. Briand, Chaudé and Bouis, p. 55, that individuals, wishing to die without committing suicide, have been known to accuse themselves of homicide which they have never perpetrated, and call down on themselves the punishment which the law inflicts on murderers.†

Mittermaier touches on an interesting subject, viz., the case of children in whom symptoms of insanity appear early, and continue for some time without being recognized. This is often observed in cases of weak intellect, maniacal outbreaks, disposition to violence and destruction, acts regarded as faults and punished as such. Some difficulties also arise from the analogies existing between real insanity and the symptoms connected with vicious habits, bad disposition, and outbursts of passion, leading to criminal acts. There are, however, exceptions to be made: thus, drunkenness, which is often the result of a habit or a vice, may induce a moral enfeeblement and engender an overpowering want, a mental affection, against which all resistance is vain; generally the criminal acts due to these states are transient, whilst those which are the

* Dagonet—"Examen des expertises médico-légales de Mittermaier, en matière d'aliénation mentale." (Annales Med.-psych., 4th series, p. 207, 1865, and 1866-'67 and '68.)

† Gazette des Tribunaux, 1st January, 1828.

result of insanity have an appreciable duration.* Guislain has also drawn good distinctions between these analogies.†

It sometimes happens that the individual who has committed the crime, under circumstances indicative of mental disturbance, appears very reasonable when examined; no symptom of insanity can be found. We must, then, take every possible care, to be sure that the patient has not had an attack of sudden transient mania, or concealed epilepsy, as in the case of the Councillor of State, Lemke, mentioned by Casper.‡ For these reasons and others it is very needful to think of the complications, such as paralysis, epilepsy, hysteria, neuroses, heart disease, deranged menstruation, the critical period of life, &c.,§ All these influences have a marked influence on insanity, a fresh proof of the absolute competence of medical men in the investigation of mental affections. The preceding cases are all the more embarrassing inasmuch as they are, to speak the truth, not clearly defined, but those of which we now propose to speak, although having more in common with insanity, still are often difficult of diagnosis.

The impossibility of resisting these impulses has been much attacked, especially when people have wished to explain a murder, theft, or incendiarism by such impulses; but a patient inquiry has placed beyond doubt that in most cases these deplorable impulses were connected almost always with recognized insanity of which they were only a symptom. There is, however, no alienist who has not met with cases of irresistible impulse, appearing quite independently of the known forms of insanity. Sometimes it is a sudden hallucination which carries away the individual. We had for several months a man from the country under our care, he told us that, in one of the attacks which preceded his admission into our house, while working in the fields, he seized a scythe and began to cut at everything he saw before him, incited by a voice which told him to do so. After having run over a great extent of land he stopped, quite tired out, at a wall, and fell

* Dagonet - Mémoires cités.

† A. Brierre de Boismont.—“Esquisses de médecine mentale.” J. Guislain, sa vie et ses écrits, p. 106, 109, 110 to 112; 1867.

‡ A. B. de Boismont, Remarques médico-légales à l'occasion du traité pratique de médecine légale de Professeur Casper. (Annal. d'hyg. et de méd. lég., p. 449, 1862.)

§ Id.—“Responsabilité médicale des médecins en Espagne. Procès en détention arbitraire de Dôna Juana Lagrera.” (Brierre de Boismont rapporteur. Annal. méd.-psych., 29th February and 14th March, 1864).

asleep. If he had met living creatures as well, what misfortunes would there not have been to deplore? Mittermaier has published the case of a distinguished man who asked to be admitted into an asylum, because he was overcome by an irresistible desire to kill his sister, and the previous evening had wished to carry out his idea. His conversation did not at all betray his mental disorder. These impulses are frequent in the different forms of insanity. The Inspector General, Girard de Cailleux, has collected 154 of such cases, among the patients of his asylum. Hadfield, one of those who attempted the life of George III., had these sudden impulses. A drunken lunatic of whom we had the care 12 years ago, and who left quite cured, recently came back to have himself taken care of in dangerous crises which came on suddenly, and he warned us to be on our guard against him. One day, without giving the least warning, he broke up a spoon in his mouth into several pieces, and it was necessary to wait till the paroxysm was over, in order to remove the pieces.

The fixed ideas of the insane may have melancholy consequences; although their origin in disease may be clear, these ideas have none the less given rise to very different results. The fifth chapter of Mittermaier, on medico-legal inquiries, tells us that two melancholics, who had killed their children, the one to deliver them from misery, the other from dishonour, were declared guilty, because the medical expert, instead of attributing their acts to an intellectual derangement, referred them to a criminal tendency. Three other melancholics, who had also killed their children, the two first from fear lest they should become as corrupt as themselves, the third that his son should escape eternal damnation, were, on the contrary, recognized as insane by the tribunals. The German jurist has shown in a lucid treatise, that the condemnation of the former was due to the faults of the expert, who relied on metaphysical arguments, whilst the acquittal of the others was due to the great experience of their medical experts who established beyond doubt the existence of insanity. Insanity of a sudden, transient, or partial kind has been much questioned, but observation has shown the reality of such cases, and the tribunals have recognized them in several instances. On the 10th of November, 1854, a youth, hardly 19 years of age, the son of one of the largest and most respectable merchants in Bordeaux, was dining with his father, of whom he was very fond, and his step-mother, to whom he had a great aversion. At dessert, he left the table, took from his

room two loaded pistols, returned to the dining-room, came up to his step-mother, and killed her. He then ran away, exclaiming: "*I am a madman, I have just killed my step-mother,*" and immediately gave himself up to the police, declared himself a prisoner, and related the circumstances attending his crime. Before and up to the time of this murder, this young man had led a regular, and it might be said, exemplary life. If the act committed by him were the result of insanity, this malady had, in his case, a rapid and sudden course, similar to an instantaneous return from madness to reason. Here was, then, a very clear instance of this sort of insanity which has been called transitory.

The Imperial Court of Pau, adopting the interpretation of the murder that the doctors, MM. Gintrac and Delafosse, (of Bordeaux), Tardieu and Devergie had suggested, considered the young accused as not having the exercise of his free will at the time of the crime, and acquitted him entirely. "How long it is," said M. Devergie, author of this work, to his colleagues of the Academy of Medicine of Paris, "from that trial to the time not far distant from ours, when M. Dupin, then an advocate, who since died a Senator and Procureur General of the Court of Cassation, wrote to the then Prefect of Police: 'Monomania is a new resource of medicine, but it would be too convenient sometimes to snatch the guilty from the just severity of the law, at others to deprive a citizen arbitrarily of his liberty; when it could not be said: *he is guilty*, it would be said *he is mad*, and we should see Charenton take the place of the Bastille!'" "How long it is," he added, "from the time when one of the most eminent of the magistracy said to Marc, on the occasion of a trial of the same sort as that at Pau: '*They are insane, but there are some sorts of insanity that it is necessary to cure on the scaffold!*'" *

We must never lose sight of the fact that we ought, in cases of sudden transitory insanity, to investigate with the greatest care the family history of the patients, and endeavour to go back to the morbid affections which may produce them. This is what M. J. Falret has done in his researches into the mental condition of epileptics, and also Dr. Krafft-Ebing, in a work in which he relates two cases of melancholics, whose tendencies to kill themselves and others were

* Devergie—Où finit la raison, où commence la folie, où point au vue du la criminalité de l'action dans la folie transitoire homicide. (Extrait des mémoires de l'académie impériale de médecine, t. xxii).

connected with neuralgia, causing great mental distress, and which Griesinger has classed under the name of disthymia.*

It is principally in moral insanity that medical men, even the most expert, meet with difficulties, sometimes quite unsurmountable. Experience shows that there are lunatics who exhibit great subtlety and a great reserve in all that concerns their mental state; they not only can conceal their malady, and pass from one subject to another in order to deceive, but they even make very bitter complaints against their relations, whom they reproach with having poisoned them, and persecuted them with the greatest injustice. They accuse the doctors of the asylum of being in league with the members of their families, whose abominable plots they aid. (See the *Irrenfreund*, No. 29, p. 180, 1862. *Ibid.*, p. 6 and 7, 1863). The existence of moral insanity and the difficulty of establishing it have been recognised by the magistrates themselves. In a trial *en interdiction* of a M. Flechet, before the imperial court of Lyons, the Advocate-General, Merville, expressed himself in these terms: "Moral or lucid insanity generally does not betray itself by fury or incoherency. Medical men sometimes require several months or several years of attentive examination in order to discover it, and the study of it is the more embarrassing sometimes, as the patient can generally conceal, with a good deal of address, the intellectual infirmity from which he suffers" "further," he adds, "all the mad-doctors have established that there are lunatics who are insane in their acts but not in their words, who answer all questions very reasonably, who express themselves very clearly, and who keep up an appearance of reason even in the midst of their delusions. It is by their antecedents, rather than by their conversation, that we find they are insane The morally insane can sometimes conceal their madness better than the most dexterous and ingenious lawyer could."†

Is not this explanation of the varieties of insanity the clearest proof how impossible it is for any but a medical man

* Dr. Krafft-Ebing—*Mania Transitoria und Beiträge zur Forentischen Casuistik der Seelenstörungen*, 1867.

† A. Brierre de Boismont—*De la Responsabilité légale des aliénés*. P. 41, 42, 1863.

Id. Cour impérial de Lyon (Chambres reunies), présidence de M. Gilardin ; demande a fin d'interdiction (*Gazette des Tribunaux* 8, 19th Jan., 5th Feby., and 3rd April, 1863). See the pamphlet on *La folie raisonnable: de l'importance du délire des actes dans le diagnostic Medico-legal de la folie raisonnable* (*Annales d'hyg. et de med. lég.*, t. 27, p. 76, 354, 1867).

to give his opinion on medico-legal questions, either civil or criminal? Clinical study, and that pursued for a long time, can alone enable him to know the physical and moral symptoms of the disease, its causes, the force of hereditary influences, of predisposition, of nervous affections, and of delusions on the conversation and actions, of successive degenerations on the production of bad dispositions and the tendency to crime.

These practical notions, which are quite indispensable for the generally admitted forms of insanity, are equally so for those morbid manifestations which are not yet classified, and which, it is thought, can be mastered by the light of common sense, such as fixed ideas, irresistible impulses, moral insanity, or that of a sudden or transitory character. This is what we said in a paper on *the utility of the family life*, when addressing our beloved companion: "How could I have followed out, without your daily and constant observations, the different forms of mental perversion exhibited by the morally insane, really protean in their diversity, which are now beginning to be recognised; how show the formal contradiction that their acts are always giving to their words, and how prove that their peculiar symptom is the impossibility of keeping to anything while their day-dream lasts?"

Medical experience is not less necessary when criminals feign insanity, or when patients conceal their state, pretending that they are not mad and get themselves condemned, accusing themselves of crimes which they have never committed in order that they may die by the hand of the executioner instead of by suicide, so that they may have time to prepare themselves to appear before God. Again, it is the physician who can enlighten families and courts of justice on obscure cases, in which children, born with the seeds of mental disorder, are regarded and punished as bad characters, or in those difficult circumstances in which perversity, vice, and passion are hardly separated from real insanity.

We feel persuaded that every one may feel clearly convinced that the alienist, like every one else who is skilled in his profession, is the only fit person to speak of what he knows.

3rd Argument of the Committee.—The propriety of studying insanity among criminals in prison, whose reason appears doubtful, and also among convicts who have been transferred to asylums as insane, in order to thoroughly understand the

connection between crime and insanity, and to establish the proper relations of mental science to the administration of justice.

The members of the committee for the study of medico-legal psychology state in their report that it has been publicly announced by Mr. Bruce, surgeon to the General Prison for Scotland that 1 out of every 9 prisoners is more or less insane, and that 1 of every 140 is quite irresponsible. He thinks, moreover, that many crimes are committed by insane epileptics, and probably belonging to the class of masked epilepsy. According to a calculation of the English convicts in prison on the 31st of March, 1862, it appears that 1 of every 25 males was found of weak intellect, insane, or epileptic.

It appears from Dr. Guy's reports, from which these facts are taken, that these prisoners are particularly prone to incendiaryism, crimes of violence, and unnatural offences, &c. The Judicial Statistics of 1867-8 also show that of 1244 criminals in prison, described as insane, 790 were so really, or had become so after conviction.

These instances, taken from numerous facts of the same kind, are sufficient to show the necessity of instituting an inquiry into this subject, in order to revise the system of criminal jurisprudence, so as to bring it into relation with the actual state of mental science.

This inquiry we have undertaken, as far as we are able, in our medico-legal study of the criminal lunatics of England, read at the Academy of Medicine of Paris (meeting of the 19th January last). Here are the results at which some of the medical men and jurists have arrived, who have occupied themselves with this question. In 1850, Ferrus, one of the two Inspectors-General who have left their mark in the study of insanity, published a very instructive work on criminals. If the divisions which he proposed had been attended to, more than one lunatic would have been saved from penal servitude and the gallows. He established in this book, in accordance with the opinions of the prison doctors, that insanity may exist: 1st, previous to conviction, and have acquired a dubious or even insidious character, which has misled the magistrates; 2nd, it may have been developed between the passing of the sentence and the final imprisonment, and owe its origin to the anxiety of the anticipation, and the fear of appearing before the court, or of the sentence; 3rd, it may have been brought

on by causes relating to the perpetration of the crime. According to the illustrious Mittermaier, the magistrates do not pay sufficient attention to the medico-legal examination of prisoners who show signs of mental affection.* M. Lelut states that undoubted lunatics had been punished by the law.

In 1852, M. Vingtrinier, chief physician to the Rouen Prisons, published a very important report on lunatics in prison and before the courts. He declared in it that, of 43,000 accused persons 260 were insane; 176 being recognised as such by the doctors, and admitted so by the magistrates, were released, and the rest were brought to trial, and convicted without the intervention of the doctors, or in spite of their opinion.†

Of six found guilty by the court of assize, one had been executed, and the other five had become insane. Of 76 tried by the *tribunaux correctionnels*, one died after the arrest, and of 19 who were consigned to the Bicêtre to undergo their sentence, the majority showed signs of mental disease. As for the 56 others, there could be no possible doubt, for a few days after their conviction they had to be sent to the Bicêtre, there to give fresh proofs of their insanity. These statements have never been questioned.‡

One of the honourable members of the Medico-Psychological Society of Paris, M. Boileau de Castlenau, chief physician to the Nîmes prisons, wrote in 1852, that the 1,200 criminals that came under his observation in 25 years, had most of them shown a remarkable amount of self-will.§

Sir Fitzroy Kelly announced in 1864, at a large meeting which he had called in London, to petition in favour of an artizan, named Wright, guilty of murder, that in the last 64 years 60 lunatics had been hung (communicated by Baron Mundy). At the same time, Dr. Madden published a paper, giving eleven cases of lunatics condemned to death, whose

* Ferrus—Des prisonniers, de l'emprisonnement et des prisons, p. 49. Paris, 1850.

† Lelut—Note médico-légale, à propos des condamnations prononcées par les tribunaux sur les individus fous, avant et pendant la mauvaise action à eux imputée et écroués dans le même état. (Annal. Med.-Psych., t. 1., p. 132. 1843.)

‡ Vingtrinier—Des aliénés dans les prisons et devant la justice. (Annal. d'hyg. et de Med. leg., t. 48, p. 369, 1853 ; et t. 49, p. 138, 1853.)

§ Boileau de Castelnau—De l'épilepsie dans ses rapports avec l'aliénation mentale, 1852.

insanity was clearly proved. Of these, eight had been executed, and three pardoned, but imprisoned.*

Lord Sydney Godolphin stated before the Parliamentary committee which sat in 1865, to inquire into capital punishment, as visitor of an asylum, that several lunatics had been executed. Dr. Harrington Tuke, proprietor of a large asylum, stated that in the cases in which the insane were inculpated for crimes involving hanging, the punishment of death was a mere lottery. (See Mittermaier, *Expertises Médico-Légales*). In short, and we close our quotations with Mittermaier, this illustrious jurist, who made a study of insanity for more than 40 years, being convinced when he made his inquiries into capital punishment, that there was a large proportion of insane among those accused and convicted, does not hesitate to say that the examination of these persons is not made with sufficient care, because he cannot doubt that many of them had lost their reason before, during and after their trial.† This fact had so impressed him that he drew up the four following propositions for the recognition of insanity among criminals :—

1st.—Inquire into the changes that have taken place in the ordinary habits and character of the accused.

2nd.—Ascertain the physical and psychological symptoms of the complaint.

3rd.—Point out the causes which can have influenced the brain.

4th.—Show, with the greatest care, the way in which the mental affection has manifested itself, whether by depression or excitement: the knowledge of one or other of these states enables us to form an opinion of the physical condition.

In spite of the importance of these inquiries into the existence of insanity among a large number of prisoners and of those accused, convictions in this class of patients are far from having ceased. Four new cases have been recorded in the last four years.

An artizan, of the department of Lozére, of irreproachable conduct, assassinated his wife, under the influence of illusions of sight which represented her to him, as well as a man

* Madden—On the criminal responsibility of the insane, p. 13—17. London, 1864.

† A. Brierre de Boismont—Charles Mittermaier, ses études sur la peine de mort, la responsabilité et l'expertise medico-legale des aliénés dans les prisons et devant les tribunaux, p. 15, 1868.

married to a person of his own choice, continually making signs, and the latter penetrating to her bed-room in the night. He also affirmed that his brother-in-law had also deceived him. The mayor and the witnesses deposed that the crime of this poor man must be laid exclusively to his visions. No medical man was called, as an expert, to examine him. He was condemned to ten years in chains. Persuaded on reading the trial and the statements which were sent us by a lawyer, that B—— was insane, we addressed a petition to the higher authorities, and we received a reply that it had been forwarded to the Minister of Justice. We do not know what was the further course of this affair, but some time after we read in the *Journal des Debats*, that a medical commission was instituted by the Ministers of Justice and of the Interior to investigate cases of real and of feigned insanity in prisons, and have such patients placed in a special quarter.

On this occasion, we may remark, the political newspapers, who accuse the alienist physicians of never replying when they are accused of detaining people in an arbitrary manner, gave good proof that everything is fair to discomfit an enemy. We had addressed a letter on the conviction of B—— to a legal journal; its intervention in this affair could have saved the unhappy lunatic. The letter was thrown into the waste basket. It must not be thought this paper stood alone; a great review and a politico-literary paper, to which we addressed some very moderate remarks on insanity, maintained the same obstinate silence, and wrote the next day that we continued to kill the dead! The same year a law student wounded, in a music hall, a young woman whom he had known. He was seized at the very moment, and afterwards tried at the assizes and convicted. His defence was that he was drunk when he did it. But his excitement, levity, the inconsistency of his replies, and the weakness of his explanations persuaded us that he was insane. Some months after, when we met with one of the servants of a central prison, we learnt that this student, on arriving at this establishment, had shown great agitation; he protested his innocence, and wanted to write to every person of celebrity to release him. Shortly after, in the middle of the religious service, he called out as loud as he could for the assassin. Having been recognised as insane, he was sent to an asylum. We asked the chief physician of this asylum, who is one of our colleagues, about the case, and he replied that the student was the subject of a most dangerous form of insanity; he

was always saying that he was poisoned, and to prevent him doing some injury, he was very frequently obliged to be restrained.

At one of the last meetings of the Medico-Psychological Society, Dr. Morel related briefly the result of the trial of Count Chorinski, who had poisoned his wife. Our colleague, when called for the defence, had stated before the court of Munich that the Count was insane, and that he would soon give indubitable proof of it. The German newspapers of Nov. 17th last informed us that he had such a violent attack of mania, that it had been necessary to put a strait-jacket on him, and take steps to have him sent to an asylum.

On the 26th of December of the same year, we read in the *Gazette des Tribunaux*, that a young man, 22 years of age, who had, in a few days, set light to 14 incendiary fires, was condemned to death. This person gave as his reason that he had had an idea which drove him to the act, viz., the recollection of the bad treatment suffered by an individual falsely accused by him of a theft, and the regret he felt at having committed this theft himself, and robbed his mother of five francs. But this criminal had tried to hang himself once because he had seen a man commit suicide in this way, and inquiry showed that his mother had been mad.

A lady, quite competent to form an opinion on this subject, who had just been reading this trial, exclaimed before us, "But he is a miserable lunatic!"

This clinical review of the insane in prisons, and on trial, was necessary to show the narrow boundary lines which exist between insanity and crime when the latter is bequeathed by hereditary tendency, and drunkenness, and strengthened by misery, the contagion of vice, bad example in every shape, absence of moral and religious education, negligence of parents, &c.

Are we not right in asking if society is really just when it applies to these degenerate beings, as such placed in fatal conditions of physical and moral inferiority, the same hard and degrading punishments that it does to real criminals?

To place the question in this light is to submit it, on the authority of facts, to the judgment of conscience and common sense. Several times at the Assizes, where we acted on the jury, in the case of prisoners whose guilty acts could no longer be explained by ordinary motives, and whose favourable antecedents made us doubtful of their criminality, we

have explained to our colleagues the practical notions of the English on criminal lunacy, and we have almost always had the reply—If a similar institution existed in France we would send there persons of this class; but, it was added, these are dangerous characters for the public safety; they must be kept from doing harm—a prison is the only possible means—we only lessen the sentence.

In the course of our long experience we have met with persons who have shown a close affinity to dangerous lunatics, and we will give two instances. Most of those with whom we have been hitherto occupied belong to the poorer classes. They are generally the children of drunkards, criminals, the insane or debauched, and have had nothing but vice before their eyes, without anything to counter-balance their wretched tendencies. It is not of such as these that we are now going to speak.

On several occasions, indeed, we have had the misfortune to see that the children of parents who deserved everybody's respect had, from their earliest years, shown a complete absence of moral sense. Family education and instruction, given first at home, and afterwards in lay and also religious establishments, severity tempered with kindness, warnings of every sort—nothing has had any influence over these defective characters.

We have heard one of these unfortunates maintain, at 15 years of age, that he had never had any idea of what is called morality. This wretched being has only too well proved it by the baseness of his tastes, by his conduct, and by the choice he made of poverty and contempt when he might have easily had good means and position. How could we avoid thinking, with these instances before us, of the irresistible impulses of the insane? Should we be wrong in such a case, if the victim did something wrong, if we exclaimed to the judge, do not throw him into prison, but send him to the special asylum which the English have devoted to criminal lunatics, and for the erection of which we have not ceased to ask for 23 years?

Perhaps the bugbear of moral insanity may be brought forward in opposition to us; we shall be content to reply that the cases which we have given have appeared to us free from the objection of moral perversity and vicious influence, while we have found in them the elements of insanity or at least of a nervous disease.

The brother of the young man alluded to suffered from morbid excitement. Several times he had complained of

aural and visual hallucinations, and had made one attempt at suicide. There were insane relatives on the maternal side.

The other class is that of gloomy and dangerous fanatics who stick at nothing to carry out Utopian schemes which can never be realised, for to Cæsar succeeds Octavius. Concealed in a cowardly way behind any sort of ambuscade, and nearly always running away after their crime, they do not hesitate to sacrifice hundreds of innocent persons in order to strike the person whom they believe to stand in the way of their projects.

It is far from our thoughts to make out all these assassins, like all the vicious, insane; there are many of them who belong entirely to the province of justice, but there are also others who are dangerous lunatics, and this opinion is not a mere assertion.

Ravaillac felt the odours of sulphur and fire exhaling from his feet. He had seen victims raise themselves in the air and settle on either side of him;* in a town he had seen the head of a negro on a statue. There is evidence to prove that Jacques Clement must be ranked amongst the insane with hallucinations.† The young German who tried to kill Napoleon I. at Schönbrunn also had visions. He perceived the genius of Germany ordering him to deliver his country. The three men who made attempts on the life of George III. were really lunatics, as Bucknill, Hood, and Haslam have shown.‡

We will only give one more instance—that of the murderer of President Lincoln. He was called Junius Brutus Booth, and had acquired a great reputation in the United States as a dramatic actor. After reading the account of him, lately published in the American Journal of Insanity, there can be no doubt as to his oddities, eccentricities, and the disordered state of his mind. The two following anecdotes are decisive proofs of it. He was a passenger on board the "Neptune," and often spoke in a melancholy way of an actor of some repute, named Conway, who had committed suicide by throwing himself into the sea. When the vessel was near the place where this unfortunate man had perished, Booth, carried away by a delusion or hallucination, rushed out of his cabin, saying that he had a message for Conway, and jumped over-

* Bazin—*Histoire de la Fronde*.

† Pierre de l'Estoile—*Journal de Henri 3rd*. See also our *Histoire des Hallucinations*, 3rd ed., p. 606, *Medecine legale*. 1865.

‡ Sketches in Bedlam—London. 1823.

board. He was picked up directly out of the water, but gave no explanation of this foolish act.

On another occasion he was to appear before a large audience at the Park Theatre. When the curtain was about to rise, it was discovered that he was not on the boards, and could be found nowhere. Messengers were sent in all directions, and at last he was found before a fire in a neighbouring street, working as hard as he could at the machine. When asked what he was doing at such a time, he replied, with a childish simplicity, "I am working to save the property of the poor."*

The last few years have been marked by a larger series of crimes apparently distinct from the causes to which they are generally attributed. Regarded as strange by the public, and declared mysterious and inexplicable by the magistrates, their authors have by some jurists been said to be lunatics, whom it was needful to cure on the scaffold. They forgot the words of the celebrated Blackstone: "The execution of a madman can only be a miserable spectacle, both against law, and of extreme inhumanity and cruelty, and can be no example to others."—(Hood, *Suggestions*, p. 13). How, indeed, can the term crime, in its true sense, be applied to the act of that nurse at Geneva, who poisoned the persons she attended, without any interested motive, or vengeance, and without sometimes even knowing them, and having been always on good terms with them? She merely replied to the questions put to her in court, that she was making experiments to cure patients who always died in the doctor's hands.—(*Gazette des Tribunaux*, 1868).

Ought not the student Jeanson, who for the most absurd motives set fire to the religious establishment, and murdered one of his companions of whom he was passionately fond, to be placed in the same class? This man was condemned to penal servitude, and when asked in prison by a visitor as to the motive of his crime, he replied, in the simplest way, as though he had been analysing the conduct of some one else, "It was the fire which made me lose my head; as soon as I saw the flame and the smoke, I was no longer master of myself. I ran to the bed of my companion and cut his throat. If the match had not ignited, and the paper had not caught light, nothing of the sort would have happened, and I should have finished my days as a respectable man, whilst I am now

* Kellogg—*American Journal of Insanity*; April, 1868.

nothing but a convict. Why should I rebel against the misfortune which has overwhelmed me? I have done wrong, I ought to be punished *most certainly.*"

If we now consider the facts we have just brought forward, we shall find that there are a great many insane among the criminals in prison. Such a result is the consequence of their origin. Most of these victims of justice are, indeed, born of parents who are drunken, imbecile, idiotic, insane, vicious, criminal or poor, &c.—that is to say of persons transmitting in the most ordinary way to their offspring the moral and physical elements of several generations.* A book, which we cannot consult too often on hereditary influences, that of Dr. Prosper Lucas, a truly Benedictine labour, contains the following passages on these two sorts of transmission :—

" In Flanders, the Nassau family ; in England, that of the Stuarts ; in France, that of the Guise, Valois, Condé, show us the same hereditary type of family in their most eminent characteristics, as in their blackest vices.

" All the family of the Guises, Voltaire remarks, was bold, factious, full of the most insolent pride, and the most bewitching politeness. From François de Guise, to him who alone and unexpectedly placed himself at the head of the Neapolitans, all were of an appearance, courage and character above the common run of men.† St. Simon, a master hand in historical portraits, has pourtrayed the character of the family of Condé with an energy and certainty which give life and soul to the men of the past, and place it alongside the ancient house of the Guises. In nearly all the princes of this name, whom he evokes, St. Simon shows us a natural and ardent intrepidity ; a remarkable appreciation of the military art, brilliant powers of intellect ; but by the side of these gifts caprices akin to madness, odious vices of heart and character, malignity, baseness, rage, covetousness, and sordid avarice, thirst for plunder, tyranny, and that sort of insolence which, as he says, has made tyrants more detested than has tyranny itself."—*Memoires de St. Simon*, t. iii, p. 131—140).

In these families the bad tendencies must have been com-

* Morel—*Traité des dégénérescences physiques, intellectuelles, et morales de l'esprit humaine*. 1857.

† Prosper Lucas—*Traité philosophique et physiologique de l'herédité naturelle* t. i., p. 542 ; 1847—t. ii., 1850 ; Paris.

bated by religion, education, the memory of ancestors, and, despite these aids, they could not be overcome. How shall we compare the failings of the poor with those of the great? With the former there is no good example, but the continual presence of vice, the absence of every religious and moral notion, the misconduct of relations, &c. We also read in a report on the Colony of Mettray, by M. de Bretiquières, on juvenile criminals, that there were 32 illegitimate children, 51 whose parents were in prison, and 424 whose friends, without employment, lived in the most abject poverty. The heredity of vice and crime is, then, very common in the families of the lower classes, but without any preventive measures as well.

Among the numerous examples brought forward by M. Prosper Lucas, we shall only take the following:—"In the month of February, 1845, a certain Jean Goudraud appeared at the Assizes of Nievre, accused of assassination. The accused had spent his youth in a cavern in the midst of a family living by brigandage, to the terror of the district. His father had been pursued many times; his eldest brother had previously undergone several convictions for ill-using his wife; another of his brothers was condemned to death for the crime of issuing false money; the youngest had also been sentenced to death for having killed his wife, after having first had her half eaten by a bulldog; his mother had been condemned to five years' solitary confinement for having been an accomplice in this horrible crime. The accused himself, also condemned to death for coining false money, had found means to escape, after the sentence had been commuted; he was so singularly formed, and so supple with his limbs, that he slipped by some means through the iron bars. When free he ended by strangling his mistress, whom he had always used very ill ever since they lived together, and wounded with a knife three persons who ran to the rescue of the victim. Since his arrest the accused gave himself out as illuminated, called himself a Messiah, only spoke in the name of his father, who was in the heavens, and pretended to have revelations. This feigned insanity, in spite of the profound skill of the new prophet, did not succeed with the jury. Jean Goudraud was condemned to death and executed!"*

The influence of hereditary tendency in crime, as proved by numerous observations mentioned in Mr. Lucas' treatise, is not the less apparent in alcoholism, insanity, and imbecility, instances of which present themselves at every step of the

* Prosper Lucas — op. cit. p. 504.

alienist's career, and it is, therefore, necessary to give every consideration to these causes when there is occasion to believe that they have exercised their influence on the acts of a criminal; indeed often, in such a case, we perceive the influence not only of one, but of several of these causes. But if experience has shown that their influence is really injurious, it is very needful to recollect that the nature of the crime has changed, and that the penalties of the law are no longer applicable, since, instead of a criminal, the jury and magistrates have only a patient before them.

Ignorance of these facts leads to deplorable consequences, for it involves the condemnation of men who have lost their free will. Since the medical man is called on to give his opinion on a crime committed under these circumstances, he must place beyond doubt the diseased condition of the accused, and guard himself against all exaggeration, either to save a guilty man or defend society. From the observations of the third paragraph, we may conclude that insanity and crime are often closely related, and that the influence of the first upon the second constitutes for the individual who has done anything wrong a new condition. As soon as medico-legal inquiry has clearly shown the existence of mental disease the tribunal has only to order the transfer of the accused to an asylum. His condemnation, under such circumstances, would be, according to Blackstone, a miserable spectacle, and an outrage on the law.

If our conviction be founded on well-observed facts, we must reply in the affirmative to the questions raised in its memorial by the committee of the English Medico-Psychological Association, and we may state our opinion in the following propositions :—

1st—It is impossible, in the present state of our knowledge of insanity, to rest the condemnation of a lunatic on his notions of good and evil, right and wrong, and the persistence of reasoning power.

2nd—Specialist physicians, appointed by the Courts, can alone show the existence of mental diseases in a criminal or civil affair.

3rd—The relations of crime and vice with insanity are placed beyond doubt by the study of mental diseases in the prisons and among convicts.

Emanuel Swedenborg. By HENRY MAUDSLEY, M.D. Lond.,
F.R.C.P.

(Concluded from No. lxx., July, Page 196.)

IN July 1745 Swedenborg returned to Sweden, and soon afterwards resigned his assessorship, so that he might be at liberty to devote himself to the new function to which he imagined that he had been especially called. Accordingly, all scientific studies and pursuits he now abandoned entirely; all worldly honours and interests he counted worthless; he devoted himself to that sacred office "to which the Lord Himself has called me, who was graciously pleased to manifest Himself to me, His unworthy servant, in a personal appearance in the year 1743; to open in me a sight of the spiritual world, and to enable me to converse with spirits and angels. . . . Hence it has been permitted me to hear and see things in another life which are astonishing, and which have never come to the knowledge of any man, nor entered into his imagination. I have been there instructed concerning different kinds of spirits, and the state of souls after death—concerning Hell, or the lamentable state of the unfaithful—concerning Heaven, or the most happy state of the faithful, and particularly concerning the doctrine of faith, which is acknowledged throughout Heaven." He is well aware that many persons will affirm that such intercourse is impossible, and that it must be mere fancy and illusion on his part, but for all this he cares not, seeing that "he has seen, heard, and had sensible experience" of what he declares.

"I am aware that many who read these pages will believe that they are fictions of the imagination; but I solemnly declare they are not fictions, but were truly done and seen; and that I saw them, not in any state of the mind asleep, but in a state of perfect wakefulness."

And he goes on to declare, calmly and seriously, the fundamental purpose of his high mission—that through him the Lord Jesus Christ made His second advent for the institution of a new church described in the Revelations under the figure of the New Jerusalem.

It must be borne in mind, with regard to these wonderful voyages to the spiritual world, that Swedenborg did not look upon it as totally unlike, far away and distinct from, the natural world of which we have experience—as a country high up above the clouds, where people are continually

occupied in doing the reverse of what they had any pleasure in doing on earth, and indeed are altogether so changed in character, habits, and pursuits that, if they can affirm their identity, they must be very much astonished at themselves. On the contrary, he considered the spiritual world to be the life and cause of the natural world, which corresponded with it throughout.

"The whole natural world corresponds to the spiritual world collectively and in every part; for the natural world exists and subsists from the spiritual world, just as an effect does from its cause. . . .

"Whenever I have been company with angels, the objects in Heaven appeared so exactly like those in the world, that I knew no other than that I was on earth.

"There is so little difference between the life of the spirit and the life of the body that those who have died can hardly realise that a change has been made.

"A man is equally a man after death, and a man so perfectly that he knows no other than that he is still on earth. He sees, hears, and speaks as on earth; he walks, runs, and sits as on earth; he eats and drinks as on earth; he sleeps and wakes as on earth; he enjoys sexual delights as on earth; in short, he is a man in general and every particular as on earth, whence it is plain that death is a continuation of life, and a mere transit to another plane of being."

All things in Heaven, he says, appear to be in place and space exactly as in the world, but all changes of place are effected by the mind. When an angel or spirit desires to go from one place to another, the desire effects its own accomplishment, and he arrives sooner or later, according as he is eager or indifferent. "Approximations in the spiritual world arise from similitudes of mind, and removals from dissimilitudes; and thus spaces are merely signs of inner differences. From this case alone the Hells are altogether separated from the Heavens."

Now Swedenborg maintained that to him it was given, by the opening of his spiritual sight, to enter the spiritual world and to see what was going on there, while he was still in the natural world; and that so completely that the spirits "knew no other than that I was one of themselves. An experience like mine no one from creation has had." It is not without interest, nor without significance, to observe what a superior position he assigns himself in the spiritual world; he is the seer in heaven as on earth; can see through the angels at a glance and teach them many things, while they

in vain attempt to contend with him in argument—are ignominiously worsted if they pretend to do so. The wonder is how any one can sincerely accept as revelation some of the absurdities and obscenities which he relates, how the nature of many of his spiritual discoveries can fail to destroy faith in his seership. On the theory of his madness, the exalted position which he serenely assumes, his assertion of a correspondence between the spiritual and the natural world, and the character of his revelations are quite consistent. He lived and moved in the world, and saw it with his bodily eyes as other persons see it; but his disordered intellect was continually occupied in spiritualistic reflections to which his disordered imagination gave shape; the morbid creations being projected outwards and then represented as events of the spiritual world. Formerly he had devoted his energies to scientific speculations, and had elaborated wonderful theories of nature; now that he had discarded all scientific pursuits, and confined himself entirely to the study and the mystical interpretation of the Scriptures, he framed a more wonderful theory of the spiritual world. His eyes were indeed opened to see what other people could not see, but the gift was nowise so singular as he imagined; every monomaniac being similarly gifted. What to him are space and time, the laws of nature, the hard-won experience of mankind, the social interests and obligations? He is above law, above criticism, above error—has a divine right to be always right!

In 1749 Swedenborg published the first volume of his "Arcana Cœlestia," the work being completed in eight quarto volumes, the last of which appeared in 1756. Most of this time he appears to have spent in London. It would be vain to attempt to give an adequate idea of the variety of subjects handled by him, and of the marvellous experiences which he records; it must suffice, from Mr. White's numerous quotations, to select and present a few illustrations. The following are from the "Spiritual Diary." The first of them indicates the disturbed nights which he often had:—

"When I was about to go to sleep, it was stated that certain spirits were conspiring to kill me; but because I was secure, I feared nothing, and fell asleep. About the middle of the night I awoke, and felt that I did not breathe from myself, but, as I believed, from Heaven. It was then plainly told me that the whole hosts of spirits had conspired to suffocate me, and as soon as they had made the attempt a heavenly respiration was opened in me and they were defeated."

Another feature of his troubled state of mind seems to have been a kleptomaniacal tendency:—

"I observed that certain spirits often wished to excite me to steal things of small value, such as are met with in shops; and so great was their desire that they actually moved my hand. I ascertained that in the world these spirits had been tradespeople, who by various artifices defrauded their customers, and thought it allowable. Some had been celebrated merchants, at which I wondered. . . . When they were with me, as soon as I saw anything in shops, or any pieces of money, or the like, their cupidity became manifest to me; for thinking themselves to be me, they urged that I should stretch forth my hand to steal, quite contrary to my usual state and custom."

Hallucinations of taste and smell were not wanting:

"It has sometimes, yea rather often, happened that what had tasted well has been changed in my mouth to what is nasty, or to another taste. Twice, if I mistake not, sugar tasted almost like salt. A liquid I drank had infused into it a salty taste expressed by the spirits from the juices of the body. . . . The taste of man is thus changed according to the phantasies of the spirits."

The Spirits plot to make him commit suicide:—

"It was often observed, that when I was in the streets Evil Spirits wished to cast me under the wheels of carriages; the effort was in fact habitual to them. To-day I noticed particularly that they were in the constant endeavour to do so. I was enabled to perceive that Evil Spirits made the attempt, and that indeed such mischief is their life.

"There was a certain woman (Sara Hesselia) who inwardly cherished such an aversion to her parents that she meditated poisoning them. She took into her head that I was willing to marry her, and when she found out that she was mistaken, she was seized with such hatred that she thought of killing me, had it been possible. She died not long afterwards.

"Some time before the faculty of conversing with Spirits was opened in me, I was impelled to commit suicide with a knife. The impulse grew so strong that I was forced to hide the knife out of sight in my desk.

"I have now discovered that Sara Hesselia was the Spirit who excited the suicidal impulse as often as I saw the knife. From this it may appear that men may be unconsciously infested with Spirits, who hated them during their life on earth."

It will be observed how Swedenborg, whose sense of right and wrong was clear and sharp, attributes to wicked Spirits

the evil impulses and feelings which sprang from his disorder. "It is given to me to know instantly," he says, "the character of Spirits, and not to believe that the feelings which they insinuate are my own, as people generally do, who credit themselves with whatever occurs in their minds." Truly, a saving faith, which evidently withheld him from the commission of many an overt act of insanity.

What he writes of the Quakers, of whom his spiritual experience had given him a very bad opinion, may be quoted here, in order to show the kind of filthy imaginings which some persons are content to accept as his spiritual revelations.

"When I awoke in the night, I felt in the hair of my head a multitude of very small snakes. It was perceived that Quaker Spirits had been plotting against me whilst I was asleep, but without effect. It was only by their phantasies that they were among my hair where I felt them.

"The secret worship of the Quakers sedulously concealed from the world was made manifest. It is a worship so wicked, execrable, and abominable, that were it known to Christians they would expel Quakers from society, and permit them to live only among beasts.

"They have a vile communion of wives. The women say they are possessed by the Devil, and that they can only be delivered if men filled with the Holy Ghost cohabit with them. Men and women sit round a table, and wait for the influx of the Spirit. . . . When a woman feels the Devil, she selects a man and retires with him, &c., &c.

"It was inquired whether the Quakers engaged in these obscene rites with their daughters and maid-servants, and it was said that they did."

These atrocious and most absurd charges bear on their face the evidence of the sink in which they were engendered; they are the disgusting spawn of a diseased fancy dwelling with a pathological sympathy upon sexual obscenities after sexual power had been exhausted by excesses. There is really no excuse which can be offered for them but the sad excuse of a diseased mind. If his followers be possessed of some sure canon by which they are able to distinguish such iniquitous assertions from those which they deem unquestionable truths of the spiritual worlds, and to pronounce them errors or hallucinations, they should declare it; for they assuredly rest on the same evidence as all the seer's other spiritual revelations, and as do the revelations of the monomaniac—the *ipse dixit* of the narrator.

Swedenborg's sublime self-sufficiency comes out strongly in his intercourse with the prophets, apostles, and other distinguished persons whom he meets in the spiritual world ; he stands in no sort of awe or reverence of them, hardly shows them common respect. Why, indeed, should he, seeing that he declared himself to have a mission equal to, or higher than, that which any of them had fulfilled ? Believing that it was through his instrumentality that the Lord Jesus Christ had made his second advent for the institution of the new church signified by the New Jerusalem in the Revelations, his coming was second only, if it was second, to the first advent. Whether he still had the notion which during his acute attack of insanity he expressed, that he was actually the Messiah, does not clearly appear ; it is certain, however, that he believed the second coming to have taken place in his person, and the reign of the new church to have commenced. He had fulfilled what John had mystically foretold in the Revelations ; and had been a witness of the last judgment which took place in the World of Spirits in the year 1757. Very characteristic of the placid monomania with which he was afflicted is the manner in which he speaks of those whose life and works placed them in a position of rivalry to him ; his serene superiority enables him to discover at a glance the evil passions with which they have been possessed. Observe what he says of David and of Paul :—“David is possessed with the lust of being chief in Heaven. . . . Persuaded that he was a god he proclaimed himself one.”

It was natural then that he should have no kind feeling to Swedenborg :—

“ When I went to bed Evil Spirits formed a design to destroy me, and for this end took measures to call out Hell and every malicious Spirit. . . . They evoked David also, who appeared before me in a dense cloud.”

Assuredly we have a right to wonder how those who accept Swedenborg's claim of a Divine mission contrive to reconcile these revelations of David's character with the character of the “ man after God's own heart.” It is impossible to accuse Swedenborg of conscious imposture ; no impostor would have ventured on gravely making such incredible statements ; it follows, therefore, either that David was an impostor, or that Swedenborg was mad. Vague and windy declamation will not obscure the issue ; for if the matter be sincerely sounded,

it will appear that from the one or the other conclusion there is no escape. After all, the theory of insanity will be found the most acceptable explanation or excuse, seeing that if it be not admitted many holy men besides David must be deemed to have been nothing better than impostors. Here is what he says of Paul and his pretensions :—

“ A certain Devil fancied himself the very Devil who deceived Adam and Eve. . . . It was given me to hear Paul speaking with him and saying he wished to be his companion, and that they would go together and make themselves gods.

“ During my sleep I have been infested by adulterers, and this Devil and Paul have lent their aid to my infesters, and so stubbornly held me in an adulterous train of thought that I could scarcely release myself. . . . Hence Paul’s nefarious character was made known.

“ Paul is among the worst of the Apostles, as has been made known to me by large experience. . . . Besides he connected himself with one of the worst Devils, who would fain rule all things, and pledged himself to obtain for him his end. It would be tedious for me to write all I know about Paul.”

We are not concerned here to vindicate Paul’s character, who certainly, though he called himself the least of the apostles, did not undervalue his importance; we are concerned only with the revelation which Swedenborg makes of his own sublime self-sufficiency in heaven as on earth. Luther hearing of his power while in the natural world to converse with those in the spiritual world, came with others to see him, and asked many questions; learning, however, that the church had come to an end and that a new church had commenced, he grew very indignant, but after a while his railing ceased, and he received the Doctrine of the New Jerusalem, and ridiculed his former tenets as in direct opposition to the Word. Calvin is in like manner refuted by Swedenborg, and rebuked in the following energetic words:—

“ You talk impiously: begone you wicked spirit! You are in the Spiritual World, and do you not know that predestination implies that some are appointed for Heaven and some for Hell? Have you any other idea of God than as of a tyrant, who admits his favourites into his city, but condemns the rest to a slaughter-house? Be ashamed then, and blush for your doctrine!”

The extracts which have been made will be sufficient to exhibit the ridiculous side of Swedenborg’s revelations of his

intercourse with the spiritual world, and the insane extravagance of his pretensions; nevertheless, it would be a great mistake to suppose that all which he says in his *Arcana Celestia* is equally foolish; it cannot, indeed, be denied that there is much of a very different character. Take, for example, his account of character, which he asserts to be the only passport to heaven; it is unchangeable after death; wherever there is a man in whose heart benevolence rules, there is an angel, and wherever there is a man in whose heart selfishness rules, there is a devil, who will remain so for all eternity. "Ample experience enables me to testify that it is impossible to communicate heavenly life to those who have led an infernal life on earth."

"Some who believed that they could easily receive divine truths after death from the lips of angels, and therewith amend their habits, were subjected to the experiment. Some of them understood the truths they heard, and appeared to accept them; but presently, when left to themselves, they rejected, and even argued against, what they had learned. Others denied the truths as quickly as they were spoken.

. . . They are told for their instruction that Heaven is not denied to any one by the Lord, and that if they please they may go there and stay as long as they like. When, however, they make the attempt, they are seized at the threshold with such anguish that, in their torment, they cast themselves down headlong."

From these and similar experiments, it is rendered certain that no change in character is possible after death; to transform an evil life into a good life would be to destroy it altogether. Surely there is here a far higher sense of truth than there is in the vulgar fancy that in changing worlds there will be a change of character; that a man, in taking leave of this life, will take leave of his tastes, feelings, habits, and opinions, and undergo suddenly a revolution of nature equivalent to the destruction of his identity and the creation of a new being. If such a transformation were to take place, it is quite plain that the individual would not know himself more than the butterfly knows the caterpillar which it has been, and that no one else would know him: a grievous, and indeed incredible disappointment to those saintly beings who are looking forward with a calm and pious assurance to the great triumph which, when they are called up to take the highest seats in heaven, they will have over those who have not known their virtues on earth. What, in truth, is the heavenly reward of a virtuous life but the love of virtue and

the unhindered practice of virtuous acts? What the punishment of hell but the delight in vice, and the unrestrained indulgence of a vicious nature? Whatever his eternal future, each man on earth has Heaven or Hell in and around him, and will assuredly take one or the other with him wherever he goes, and not find it there. Accordingly, Swedenborg asserts that no one is punished in the world of spirits for deeds done on earth. An evil spirit is only punished for the crimes he then and there commits. "Nevertheless, there is no actual difference, whether it is said that the wicked are punished for their crimes on earth, or for the crimes they commit in the world of spirits; because every being preserves his character through death, and attempts to repeat the deeds done in the flesh."

He observed that the angels at once discovered a man's autobiography in his structure:—

"When a man's deeds are discovered after death, the angels, who are inquisitors, look into his face, and extend their examination over his whole body, beginning with the fingers of each hand. I was surprised at this, and the reason was thus explained to me—

"Every volition and thought of man is inscribed on his brain; for volition and thought have their beginnings in the brain, whence they are conveyed to the bodily members, wherein they terminate. Whatever, therefore, is in the mind is in the brain, and from the brain in the body, according to the order of its parts. Thus a man writes his life in his physique, and thus the angels discover his autobiography in his structure."

Is there not here the assertion of a great scientific truth, whether it be a truth of the spiritual world or not? The history of a man is his character, and his character is written in his organisation, and might be read there had we but senses acute enough to decipher the organic letters. There is not a thought of the mind, not a feeling of the heart, not an aspiration of the soul, not a passion which finds vent, not a deed which is done, that is not graved with an unfailing art in the structure of the body; its every organ and the constituent elements of each organ grow to the fashion of their exercise, and there is nothing covered that might not be revealed, nothing hid that might not be known. Is not this a high, solemn, and appalling thought? If there be a resurrection of the body, then the opening of the book at the day of judgment will be an un-

folding of the everlasting roll of its remembrance ; but if the body rise not again, still its life has not passed issueless, for every act has blended with and become a part of the energy of nature, increasing or diminishing the evil or good in it, and will never through all time have an end.

What Swedenborg says concerning the mode of life necessary in order to enter Heaven, deserves to be quoted as an indication of the practical spirit which he had inherited from his shrewd and rather worldly father. To live for Heaven, it is not at all necessary that a man cease to live outwardly as others do ; he may grow rich, keep a plentiful table, dwell in a fine house, wear splendid apparel, and enjoy the pleasures of the world and the flesh :—

“ It is quite allowable that a man should acquire and accumulate wealth, provided he employ no cunning or wicked artifice ; that he should eat and drink delicately, provided he do not make life consist in eating and drinking ; that he should dwell in magnificence according to his estate ; that he should converse as others do, frequent places of amusement, and busy himself in worldly affairs. There is no necessity for him to assume a devout aspect, a sad countenance, or to hang his head ; he may be glad and cheerful ; nor is he compelled to give to the poor, except so far as he is moved by affection. In one word, he may live outwardly as a man of the world, and such conduct will not hinder his admission to Heaven, if only he thinks interiorly in a becoming manner of God, and in business deals righteously with his neighbour.

“ From much conversation and experience among Angels, it has been given me to know most certainly that the rich enter Heaven as easily as the poor ; that no one is excluded from Heaven because he has lived in abundance, and that no one is admitted because he has been poor. Rich and poor alike have entered Heaven, and many who have been rich enjoy greater glory and happiness than those who have been poor. The poor do not go to Heaven on account of their poverty, but on account of their life ; for whether a man be rich or poor, he is what his life is, and if he live well he is received, and if he live ill he is rejected.”

A far more easy and practicable religion for everyday life than the religion which Swedenborg claimed to have carried forward to a new and higher development. It has been charged against the moral precepts of Christianity, as taught in the New Testament, that they concern themselves with suffering only, not with doing, inculcating passivity, but nowise helping in the active work of life, and therefore, if carried out in practice, placing the good man entirely at the

mercy of the bad. They do not, it is said, constitute a complete code of doctrine sufficient for guidance and direction in the practical struggle of existence, but require to be supplemented by a series of maxims applicable to the development and formation of character under the duties and responsibilities of active life. Certainly it is not in the New Testament that men find the principles requisite for the successful conduct of life on the exchange, at the bar, in the senate, or in any other department of eager competition and strife. It would scarcely be correct to say that Swedenborg has furnished a practical code of morality deriving its life and power from the morality of the New Testament; but he has throughout his writings produced such a mass of sound criticism and instructive commentary as constitutes an important contribution to a practical system of Christian ethics. He is inconsistent, he contradicts himself, he puts forward strange and quite unacceptable doctrines; still his clear sincerity, and the marvellous powers which he frequently displays in his exposition of the Scriptures, call forth irresistibly a feeling of admiration, and almost constrain, not a belief in his spiritual pretensions, but an acquiescence in Emerson's description of him as a colossal soul, "one of the mastodons of literature." It would be impossible, by the quotations which we are able to make here, to give a faithful idea of his moral reflections and Scriptural commentaries; while reading some of them one cannot help looking back from time to time to his history, and to the character of some of his other writings, to be reminded of the madness of his pretensions. The extract which follows, dealing with the Scriptural maxim to love your neighbour as yourself, will serve to show the characteristically practical term which Swedenborg gives to it. It is not the individual who is to be loved, but the goodness and truth in him that are to be loved.

" Set before you three persons, or ten, whom you may be selecting for some domestic office, and what other criterion have you but the goodness and truth which are in them. Man is man from goodness and truth. Or, if you are selecting one or two to enter your service, do you not inquire into the will and intellect of each? The neighbour you can love will be the one you will choose on this occasion. A Man Devil may present the same appearance as a Man Angel. Benefiting the Man Angel for the sake of goodness and truth in him, and not benefiting the Man Devil, is charity; for charity consists in punishing the Man Devil if he does evil, and in rewarding the Man Angel.

"A man is a neighbour according to the kind and measure of his goodness. Whoever does not distinguish mankind by the test of goodness may be deceived in a thousand instances, and his charity confounded and annulled . . . It is commonly believed that a brother or a kinsman is more a neighbour than a stranger, and a fellow-countryman than a foreigner; but birth does not make one person more a neighbour than another, not even a father or a mother, nor education, nor kin, nor country. Every one is a neighbour according to his goodness, be he Greek or Gentile . . .

"Charity, that is really genuine, is prudent and wise. Other charity is spurious, because merely impulsive, gushing from the will without qualification in the light of the understanding.

When an evil-minded person takes the coat which belongs to another, it is no charity to give him a cloak also—the charity is to get him punished as expeditiously as possible; and the worst use to put great possessions to is to sell them in order to give to the poor, merely because they are poor. Such is the evolution to which the passive morality of Christianity comes in the church of the New Jerusalem; and it is not improbable that some of those conscientious men who sincerely accept Swedenborg as a prophet find no little comfort of mind in a code which, while deriving its inspiration from the morality of the New Testament, yet adapts it to the exigencies of daily life in a world where the wicked abound, and must be held in some kind of subjection. Prime Minister Höpken, who had known Swedenborg for two and forty years, and who averred that in all his experience he did not recollect a character of more uniform excellence—always contented, never fretful nor morose, said of his religion—

"I have sometimes told the King that if ever a new colony were formed, no better religion could be established there than that developed by Swedenborg from the Sacred Scriptures, and for these reasons:—

"I. This religion, in preference to, and in a higher degree than any other, must produce the most honest and industrious subjects; for it places, and places properly, *the worship of God in uses*.

"II. It causes *the least fear of death*; death being regarded merely as a transition from one state to another, from a worse to a better situation. Upon his principles, I look upon death as of hardly greater consequence than drinking a glass of water."

One virtue of Swedenborg, which he shares with Bacon and Goethe, and which should be made mention of here, was that he detested, and gave vigorous expression to his detesta-

tion of, metaphysics, as barren and fallacious, transcending the sphere of thought, and by means of which theology had been drawn from its simplicity, and made artificial and corrupt. It was seldom that his practical instincts deserted him; he was certainly not, in any just sense of the word, a mystic.

Thus much as to the revelation which Swedenborg makes of himself in his writings. It will be interesting, before concluding, to ascertain the sort of impression which he produced on those who had personal intercourse with him. Unfortunately the principal information which we have on this point comes from those who have been specially interested in giving it, and whose testimony is not free from the bias of their belief in his pretensions. Stories in confirmation of his miraculous powers are related as wonderful and true, while stories discrediting them are put down as false and spiteful. The vulgar notion that a madman must be incoherent, or dangerous, or furious, prepared those who had read his extraordinary revelations to find something strange in his behaviour, and when they were introduced to a calm and courteous old gentleman, who conversed sensibly on all ordinary subjects and related his extraordinary spiritual experiences with a quiet and assured confidence, they were naturally surprised, and found it hard to believe that his stories had not some real foundation. How little warranted by facts such a conclusion was, an hour's experience in a lunatic asylum would have proved to them. Then again, it is not likely that any one, not particularly interested in him, would be at the pains to put on record their experience of him. Mrs. Cottle is constantly publishing extraordinary interpretations of Scripture, and distributing them far and wide, as Swedenborg distributed his books, to bishops, deans, clergy, universities, and persons of eminence in different countries; but no one thinks it worth while to enter upon a formal refutation of Mrs. Cottle, or to record for the benefit of generations to come their opinion of her lunacy. What is self-evident needs no demonstration. When we do happen to get the evidence of disinterested witnesses, who had had opportunities of lengthened observation, it proves that the suspicion of madness was excited by his singular behaviour. On one of his voyages from Sweden to England, when he had kept his berth almost the whole time, and had been often heard speaking as if in conversation, the steward and cabin boy informed the captain that their passenger was out of his mind.

“Out of his mind or not,” said the captain, “as long as he is quiet I have no power over him. He is always reasonable with me, and I have the best of weather when he is aboard.” Those that go down to the sea in ships are not free from superstition, and Swedenborg’s presence on board seems to have been thought lucky, as associated with a quick passage. At one time he appears to have run some danger of being sent to a lunatic asylum, his nephew Bishop Filenius and some of the clergy having entertained the idea on account of the offence which his heretical doctrines were to the established religion. Happily the design, if it were ever seriously entertained, came to naught: it would have been a great pity and a greater injustice had it been carried into effect. Neither science nor philosophy has yet apprehended all things that are in heaven and earth, and it is always well, therefore, to examine without prejudice, rather than to suppress with hasty violence, any novel opinions, however strange and incredible they may seem. The history of the progress of knowledge is a history of the incredible becoming credible, of the strange being found true.

For a short time, in 1761, Swedenborg took an active part, as a member of the House of Nobles, in the deliberation of the Swedish diet. He evinced great interest in the questions which were discussed, spoke with credit to himself, and was listened to with respect; but soon perceiving, as he thought, that envy, hatred, and self-seeking prevailed among the members, he became dissatisfied, and ceased to attend. Instead of living and labouring among men, helping by patient endurance and wise insight to guide and lead them in the right way—being in the world, if not of it, he retired to his meditations and visions, where he had matters all his own way. Thus he abandoned a life of action, whereby the just balance of the faculties is maintained, and went willingly the way of his madness.

When in Sweden he lived in a small house, which he had built himself in one of the suburbs of Stockholm, his servants being a gardener and his wife, who lived in the house. He gave very little trouble, his diet being very simple; he made his own coffee, which he drank freely day and night, and his dinner was usually a small loaf broken into boiled milk. He slept between blankets, not liking sheets, and, as he informed the Rev. A. Ferelius, “never washed his face or hands, and never brushed his clothes, for no dirt nor dust would stick to

him." His bodily health was usually good; sometimes, however, he suffered from severe toothache, which he attributed to hypocritical spirits, who beset him. On one occasion Paul was the wicked spirit that thus troubled him. A most wicked adulterer was with him some days, and produced pains in the toes of his left foot, loins, and breast. Devils tried to enter his brain and kill him, but the Lord saved him. So it was with other pains, which ceased when the evil spirits which induced them were routed. He paid little regard to day and night, sometimes sleeping through the one and working through the other, and he would occasionally lie in bed entranced for days together. He was often heard talking aloud in the night, and when asked what had been the matter, would answer that evil spirits had blasphemed, and that he was speaking against them zealously.

"Sometimes he would weep bitterly, and cry, with a loud voice, 'Lord, help me! O! Lord, my God, forsake me not!' When seen in these states, he appeared as sick. When delivered from them he would say, 'God be eternally praised! All suffering has passed away. Be comforted, my friends; nothing happens to me which the Lord does not permit.'

"After one of these trials, he went to bed and did not rise for several days. His servants grew uneasy; perhaps he had died of fright; and they debated whether they should not summon his relatives, and force open the door. At length the gardener climbed to the window, and, to his great relief, saw his master turn in bed. Next day he rang the bell. The wife went to the room, and related how anxious they had been, to which he cheerfully replied he had been very well, and had wanted for nothing."

He was accessible and affable to visitors, women excepted,* and talked freely concerning his intercourse with the spiritual world, speaking with such an air of gravity and sincerity as prevented any unbecoming display of incredulity. Nevertheless, he exhibited considerable shrewdness in evading attempts on the part of believers to obtain a positive test of his wonderful powers. A certain student of Upsal, Nicolas Collin, who, having read his books with admiration, visited him, requested as a great favour that he would procure him an interview with his brother who had died a few months before. Swedenborg en-

* He would see no lady alone, asserting that "women are artful and might pretend that I sought their closer acquaintance." Evidently he had not failed to profit by the mistress-keeping experience of his younger days.

quired what his motives were for desiring such a communication. "I confessed I had none besides gratifying brotherly affection, and an ardent wish to explore a scene so sublime and interesting to a serious mind. He replied that my motives were good, but not sufficient; that if any important spiritual or temporal concern of mine had been the case, he would then have solicited permission from the Angels, who regulate those matters." Lavater, who wrote to him from Zurich with great respect and sincerity, putting four definite questions which he was eager to have answered, was not more successful. Swedenborg did not reply to the letter; and a second, similarly earnest and pressing, letter which Lavater sent was also left unanswered, notwithstanding the profound expression of reverence and the urgent entreaty which it contained. To a Minister of State who applied to him for information concerning a certain young Prince who had disappeared, without any one knowing what had become of him, he replied, that the Prince was in a society of the Spiritual World to which he could not readily gain admission; that the Angels had no knowledge of his state; and that the matter was not of sufficient importance to warrant an application to the Lord about it. Profusely liberal in his revelations when there was no opportunity of checking his stories, he evaded such direct questions as would have brought his pretensions to the test of experiment. It is, as it ever has been, a circumstance incident to manifestations of the supernatural that they fail to take place just when, in order to confound the sceptical, they ought to take place, and that they are needlessly abundant in the presence of those who are so full of faith that they do not require to be convinced in order to testify of them. No wonder then that so many persons who find it nowise contrary to the order of nature to believe in the existence of fanatics, madmen, and impostors, claiming supernatural powers and witnessing to supernatural stories, do find it altogether contrary to their experience of the order of nature to believe in supernatural events.

About the beginning of August, 1771, Swedenborg visited England for the last time. He took possession of the lodgings in Cold Bath Fields, which he had occupied on a former occasion, at the house of one Richard Shearsmith, a wig-maker. There, on Christmas Eve, he had a stroke of apoplexy which deprived him of the power of speech and produced paralysis of one side. From this attack he rallied for a time, recovering his speech, but on the 29th of March, 1772, he

gently expired, having, it is said, predicted on what day he should die. "He was as pleased," said the servant, "as I should have been if I was going to have a holiday, or going to some merry-making."

Thus passed over to the silent majority one the story of whose life, notwithstanding the eccentricities which it exposes, cannot fail to excite a kindly interest. There would be no advantage, but on the contrary a certainty of misinterpretation, in attempting to make a summary estimate of his character; this is best exhibited in the history of his life. The truth assuredly lies in the mean between the opposing views taken of him. On the one hand, there are those who see in him an inspired seer, and stubbornly refuse to see any insanity; on the other hand, there are those who see only the insanity, and dismiss him with pity or contempt. There is truth in both these extreme opinions, error in both of them. That Swedenborg did, as he asserted, enter the spiritual world, and have daily intercourse with angels there, and see and hear the things which he declared that he saw and heard, is an opinion which it would be a humiliation and shame to discuss seriously in this century, unless some reason can be given for supposing that all the delusions of insanity are broken glimpses of a higher region of existence than our sound senses can take cognizance of. In that case, however, it might still be open to dispute whether Swedenborg's heaven discovers any higher scenes and events, or a more exalted order of beings, than the world in which we live; for it seems truly rather a vulgar and a commonplace invention, such as any person of ordinary ingenuity giving the rein to his fancy, and untroubled by any doubt of himself, might easily imagine. Certainly there is nothing in his revelations which by its inherent power and grandeur intimates even, much less testifies to, a superhuman insight; nothing which is inconsistent or incompatible with the wild imaginations of a person the balance of whose faculties has been lost. Like the painter's picture of a lion beneath which it was necessary to write—"This is a lion," Swedenborg's representation of the spiritual world needs a like inscription in order to be known. Looking simply to the intellectual power displayed in its manufacture, we are bound to acknowledge that it cannot be compared for a moment with that which is exhibited in a drama of Shakespeare, or even with that which we may recognise in a superior novel. Compare the visions of Swedenborg, who had so many times been in

heaven, with the visions of Dante, ‘the man who had seen hell,’ do they not show by the side of these like the wild, dreary and incoherent flights of a dreaming or a delirious imagination? How immeasurably below the true and noble creations of a great imagination, rightly cultivated, working calmly under the restraints of law, and revealing its insight and strength in its repose and self-control. Consider the ridiculous height to which Swedenborg exalts himself : he is as much superior to the inhabitants of heaven as he is to the dwellers upon earth, for while possessing, as a natural man, all the privileges of spiritual insight which the angels have, and easily surpassing them in spiritual knowledge, he can in a moment become invisible to them, by returning to his natural self. That he has found disciples who devoutly accept to the uttermost these pretensions proves that it is impossible to be too bold in speculating on the credulity of mankind.

On the other hand, it cannot be denied that among the many absurd things he has written there are also many words of wisdom, fruitful veins of original thought, and passages profoundly suggestive even to the best of minds. Because a man's mind is unsound, all which he says is not therefore folly. It is a vulgar and mischievous error, springing from the grossest ignorance of insanity, to suppose that a person who speaks rationally and behaves with propriety cannot be mad, as it is also to suppose madmen necessarily incapable of rational, intellectual exertion ; athwart the murky atmosphere of madness lightning flashes of the deepest insight occasionally shoot, and the light of genius is sometimes only the light of a falling star. The recognition of Swedenborg's hallucinations and delusions, and the rejection of the cardinal doctrines of his later years, on the ground of insanity, by no means warrant the rejection of all that he has developed from his false premises or engrafted on them. Moreover, though he was insane, he was capable of taking care of himself sufficiently well, and of managing his affairs with prudence.

Perhaps it was fortunate for the prophet of the Church of the New Jerusalem that he lived in Sweden, and in the last century ; for had he lived at the present day in England it is very doubtful whether he would have been left in undisturbed possession of his freedom and his property. There might, indeed, have been no small danger of the extinction of his prophetic mission in a lunatic asylum. Whether the world would have suffered loss or gained anything by the violent suppression of his doctrines are questions concerning which

conjectures must be futile ; but our conviction unquestionably is that it would have suffered loss. In truth, no one has yet sufficiently considered how much originality and individuality are systematically suppressed in lunatic asylums, and how hard it would have gone with some of the most distinguished reformers of past generations if their lots had been cast in these days when there are scattered over the land so many overgrown and overcrowded asylums. Can any one, after reading the *Journal of George Fox*, believe that he would not, had he lived now, have found his way into a lunatic asylum. Thus would Quakerism have been blasted in its germ, and the world robbed of all the benefit which it has reaped from that form of religious belief. Of autobiographies, one of the most interesting is the autobiography of Benvenuto Cellini, but the perusal of it cannot fail to convince a candid reader that Benvenuto Cellini, had he lived now, would have been shut up in a lunatic asylum long before he had produced his finest works of art. Had not Comte been removed from Esquirol's asylum when there seemed no prospect of his recovery, and taken home to the care of his wife, it may be deemed certain that the world would never have had the system of the positive philosophy. The power of stepping out of the beaten track of thought, of bursting by a happy inspiration through the bonds of habit and originating a new line of reflection, is most rare, and should be welcomed and profited by, in spite of its often-times becoming extravagant, and sometimes degenerating into the vagaries of insanity. The individuals who manifest these impulses of development may not see their true relations, and may carry them to a ridiculous extreme ; but they are still perhaps the unconscious organs of a new birth of thought, which shall plant itself and become largely fruitful in the minds of others possessed of a larger philosophic capacity, but not perhaps capable of the originating inspiration ; for the men who perceive and co-ordinate the tendencies of development are not commonly the men who originate them. The originality is truly an inspiration, coming we know not whence, and the very opposite in action to that power of habit which entrals the mental life of the majority of mankind. There are antagonistic forces at work in the determination of the orbit of human thought as there are in the determination of the orbit of the planets—a centrifugal or revolutionary force giving the expansive impulse of new ideas, and a centripetal or conservative force manifest in the restraining influence of habit ; the resultant of their opposing actions being the determination of the orbit of the evolution of mind. Is it

not then beyond measure sad to think that precious germs of originality may be blighted by the practice, too prevalent in this era, of treating as insanity any marked deviation from the common standard of thought or action. Nature, we know, shows a most lavish and reckless waste of life, of fifty seeds often bringing not even one to bear, but herein does not set an example which it is man's duty or interest to follow; for the purpose or *nusus* of his being is to improve upon nature to carry it through human nature to a higher evolution. In accomplishing patiently and faithfully this function he must work by a far other method than that which self-inspired seers into self-created spiritual worlds adopt; but while rejecting their method he may still gratefully gather the good fruits of their lives, and profit by the instruction which is to be obtained from the study of even the most erratic orbits. Now, as ever, and for ever, it is true that the wrath, the folly, the madness of men are made to praise Him whom sun and moon, fire and heat, winter and summer, mountains and hills, seas and floods, the fowls of the air, the whales and all that move in the waters, the green things of the earth, and the holy and humble men of heart bless, praise, and magnify for ever, but whom systems of theology and the prophets thereof have so often dishonoured.

OCCASIONAL NOTES OF THE QUARTER.

The County Lunatic Asylums under the County Administration Bill, 1869.

THE "County Administration Bill," introduced into the House of Commons by the Home Office last Session, is certain to be brought forward again next year, and will, doubtless, in some shape, become law. It is self-evident that after the recent large extensions of the suffrage, the more limited demand for a share in the control of the county expenditure can no longer be refused to the great body of the ratepayers, and theoretical Liberalism must admit the claims of the middle class, as represented by the Boards of Guardians, to a voice in the deliberations of the Quarter Sessions,—that County Parliament still held by the landed interest as their exclusive right and inheritance.

To meet this long wished for reform, and to place the county ratepayers in the position of those in the cities and boroughs, the Home Office brought forward last Session the *County Board Bill Act, 1869 ; a Bill for establishing Administrative Boards for the transaction of County Business in England*, and the measure is one of those commended to our vacation deliberation in the Queen's Prorogation Speech.

Under the provisions of this Bill the administrative business of the county is to be transferred from the Court of Quarter Sessions to a Board, to be called the "County Board," consisting of two distinct elements, the Justices of the Peace for the county and elective members from the Boards of Guardians of each Union within the county, in numbers proportioned to the gross estimated rental of the Union, according to a scale specified in the first schedule of the Act.

The elective members of a County Board are to hold office for five years, and to retire by rotation. This County Board is to be a body corporate, by the name of the County Board of the county to which it belongs, having a perpetual succession and a common seal, &c., &c.

With the exception of the trial of prisoners at Quarter Sessions, the hearing of appeals, and other judicial business, and the government of the county prisons, all the powers, rights, and duties now vested in, or attached to, the Justices of the county in Quarter Sessions assembled, are to be vested in and attached to the County Board.

For the transaction of their varied business, the County Boards are to appoint a sufficient number of Committees, to whom they are empowered to delegate the executive powers belonging to the Board ; but *no such Committee shall be deemed to be duly constituted unless it consist of an equal number of official and elective members.* The fourth schedule of the Act regulates the proceedings of the Committees of County Boards.

Should this Bill pass in this present form, the government of the county asylums will be transferred from the Quarter Sessions and the Committees of Visitors to one of the mixed committees of the County Boards. Now, while recognising the undoubted right of the ratepayers to control, as a part of the county finances, the expenditure on the County Asylums, many reasons may be adduced against this proposed transfer from a permanent committee of visitors to a varying mixed board, of the many intricate and delicate points involved in the working of the County Lunatic Asylums. The lunacy

laws are so complicated, and their present adjustment so difficult, as hardly to admit of further alteration in the relative relations existing between the Commissioners in Lunacy, the Committees of Visitors, and the Medical Superintendents of the County Asylums.

The Acts of Parliament regulating the county asylums are all drawn with a view to these relations, and will require material alterations and patching * should these asylums be thus transferred from the control of the Quarter Sessions to that of the new County Administrative Boards. It thus seems desirable that the county asylums should be included in the provisions of sec. 9 of the Act, which already reserves to the exclusive jurisdiction of the Justices in Quarter Sessions the regulations for the government of prisons and the nomination of Visiting Justices to them. The reasons which doubtless influenced the Home Office in their decision to exclude the government of the county prisons from the control of the new County Administrative Boards apply with equal force to the County Asylums. In both there are complicated relations affecting the liberty of the subject to be judicially

* Thus a recent writer in the *Lancet* points out the necessity which will exist should the County Administration Bill pass, of placing the removal of the officers of the county asylums out of the control of a committee of the county financial boards. "The tenth clause of the County Administrative Bill," he writes, "provides that the executive powers of the county board may be delegated to a committee, but such committee shall not be deemed to be duly constituted unless it consist of an equal number of official and elected members, the latter of whom must be elected members of boards of guardians in the county. The security, fortunes, and honour of a considerable number of medical men are thus placed absolutely at the disposal of this delegated committee, without any powers of appeal to, or redress from any, superior board or authority whatsoever. That the medical journals, the various Associations, the General Medical Council, and others interested in the general or material prosperity of their professional brethren, should have so long overlooked this definite and pressing grievance, must be a matter of surprise. The subject, nevertheless, had not escaped the scrutiny of some gentlemen of high standing, authority, and acquirements so far back as 1859—Her Majesty's Commissioners of Inquiry into the state of the Irish Asylums. In their valuable and instructive Report, page 9, the opinions and recommendations on the subject of asylum appointments are fully recorded; and with regard to this particular question, the power of discharging the chief officers, they report to Her Majesty that the Government, and not the visiting committees, should have a power of removal, founded on full investigation of the officer's incapacity or misconduct. This document is signed by Sir Thomas Reddington, R. Andrews, Esq., Messrs. Lutwidge and Wilkes, the English Lunacy Commissioners, and by Sir Dominic Corrigan—names of men who have done the State some service. The rights that have been bestowed upon the Irish superintendents must surely be the due of the English ones, nor should the inferior position of the latter be allowed to rest without redress. The Poor-law medical staff have been long emancipated from the power of the village guardians. Will they allow their less fortunate

dealt with. Moreover the good old argument *quieta non movere* applies strongly in both cases. Certainly the county asylums of England, under the joint government of the Quarter Sessions, of the Home Secretary (as represented by the Lunacy Commissioners), and of their resident Medical Superintendents have, since the lunacy legislation of 1845, been built up and consolidated in a manner which has commanded the unanimous approval of the scientific world. The great problem of the treatment of the insane, without mechanical restraint, has been so solved within their walls, as to place the English County Asylums foremost in the van, and to make their wards the source and centre of the work which is now being undertaken in every civilised country towards the amelioration of the condition of those sick in mind. It surely seems unwise to risk arresting this great triumph of civilization, by needlessly passing on, from the Quarter

brethren to come within their control? Will they not rather render assistance in obtaining the insertion of a clause in the County Administration Bill, that no medical officer of any asylum, maintained wholly or in part out of the public rates, shall be dismissed without the sanction of the Secretary of State being first obtained, and that founded on a full investigation into the officer's incapacity or impropriety of conduct."

In the *Medical Times and Gazette* a similar opinion has been expressed:—

"One of the most important Bills ever introduced into Parliament, affecting the interests of the tax-payer in every county in England, has just been printed by order of the House of Commons. I refer to the County Financial Boards Bill. It has long been a standing axiom in British and Colonial legislation that taxation and representation should be co-extensive, but the doctrine has not hitherto been put into practice in the English counties. The present Bill provides for the establishment of a representative and responsible body, under whose direct control the expenditure of various public institutions will be brought, thus materially altering relations between the officers and the new boards or committees of management. It is, however, with the medical officers of lunatic asylums, and not with clerks of the peace, county surveyors, or cattle-plague officials, that the medical journalist has to deal. The position of gentlemen attached to the above institutions has always been one of peculiar delicacy and difficulty. Too few to make any impression collectively, their condition can only be ameliorated by the aid of their professional brethren, or by the dealing out of that even-handed justice which has produced the Bill itself. Thus while the officers of the Poor-law medical service can only be dismissed for some dereliction of duty after an impartial inquiry, and with the approval of the Poor-law Board, the medical officers of the other branches of the public services in question are in the position of private employés of the Visiting Justices, and are liable to dismissal without any power of appeal. The notable case of Mr. Miller that occurred a few years ago shows that this manner of punishment may be applied with equal effect against the innocent or the guilty. It seems, therefore, but just, that the representatives of the medical profession in Parliament, both general and special, should see that a clause be inserted in the new Bill to the effect that no Medical Superintendent of any asylum, maintained wholly or in part out of the public rates, shall be liable to dismissal without cause being shown to the satisfaction of Her Majesty's Secretary of State for the Home Department."

Sessions and Visiting Justices to weaker hands the control and direction of these Asylums.

The following amendment of clause 9 would save this possible mischief :—

9. There shall be reserved exclusively to the Justices in Quarter Sessions assembled the trial of offenders, the hearing of appeals, and all other judicial business; also the making regulations for the government of prisons, the nomination of Visiting Justices of prisons, and the making rules with respect to the Visiting Justices.

After "the nomination of Visiting Justices of Prisons," add *and of County Asylums.*

Were this clause thus amended, the general financial control of the County Boards over county expenditure—the object of its framers—would equally regulate the charges on the county rate for the building, repair, and enlargement of the County Asylums and of the County Prisons.

The "Pall Mall Gazette," on the Treatment of Criminal Lunatics.

The *Pall Mall Gazette** lately devoted an article to *Life Imprisonment for Lunatics and Criminals*. The report (it writes) recently made by the Commissioners in Lunacy on the Broadmoor Criminal Lunatic Asylum contains some features of unusual interest at the present moment, when the publication of the memoirs of Dr. Conolly has recalled to mind the system of non-mechanical restraint which he advocated, and the success which, as a rule, resulted from the adoption of it.

The tendency of this article is to discredit the application of the non-restraint system, as Dr. Conolly taught it, to the treatment of the criminal lunatics at Broadmoor, and to ridicule the efforts of the Commissioners in Lunacy to enforce its practice on the Council of Supervision of that establishment.†

* September 6.

† The *Pall Mall Gazette* is hardly so accurate as might be expected from its pretensions to deal *ex-cathedrā* with this difficult psychological problem, when it informs its readers that—"For our criminal lunatics, so called, we have three State establishments, exclusive of hospitals for soldiers and sailors, and these are Fisherton House, a certain number of wards in Bethlehem, and Broadmoor Hospital." Fisherton House is a private licensed asylum, and the criminal wards at Bethlehem have long since been pulled down and a garden now fills their place.

The remarks of the *Pall Mall Gazette* are founded on a Parliamentary paper, "Broadmoor Criminal Lunatic," (ordered by the House of Commons to be printed 3rd June, 1869), containing the report made by the Commissioners in Lunacy upon Broadmoor Criminal Lunatic Asylum, dated October 14th, 1868, and a reply to that report in a letter from the Council of Supervision of Broadmoor to the Under Secretary of State for the Home Department, dated May 18th, 1869.

The paragraph in the Commissioners' Report, which has given rise to this discussion, is the following :—

" Though the painting noticed at the last visit as having been commenced in the blocks occupied by the less favourable class of patients has not been carried far in the way of cheerfulness, there is yet an improved aspect about these portions of the building; otherwise, they remain, in structural defects, in scantiness of furniture and comfort, and in prison-like arrangements for their inmates, substantially the same as when objection was first made to them. They are a marked contrast to other parts of the asylum. Of the violent and even dangerous propensities of some of the patients placed in these wards, and of the generally unfavourable character of the rest, there is no doubt; but it is a matter of the gravest doubt whether insane persons of the criminal class, having this disposition, should be treated differently from other patients suffering under mental disease. The experience of the Commissioners has led them to the conclusion that patients of the most refractory class are amenable to the influences which, by general consent, are now employed in the treatment as well of the most acute as of the mildest forms of mental disorder; and that it is both expedient and safe to extend to them, under vigilant and incessant supervision, the same kind of advantages. If, indeed, the withholding of all indulgence were more likely than the concession of it to have a beneficial effect, there is nothing in the class of cases in this asylum that should intercept, on any ground of personal consideration or sympathy, an application of the repressive system to the fullest extent; but in other times there has been sufficient trial of that system, on all descriptions of patients and in every conceivable state of circumstances, and it has uniformly failed as completely as the other has succeeded in a more or less degree. It has been found, all but invariably, that by association with others, by some occupation as far as practicable, by the prospect from time to time of some recreation or amusement, above all by regular daily out-door exercise, improvement has been made in habits the most inveterate, and in the most evil dispositions. No attempts of the kind are now made at Broadmoor. If a patient exhibits violent conduct, he is for so many days, or portions of days, put into seclusion. If he is supposed to be, or has

given proof of being dangerous, he is isolated altogether. To none set apart as refractory are the arrangements applied, which make judicious and satisfactory provision for the bulk of the inmates by suitable accommodation and considerate treatment. The excepted class occupy cheerless rooms, have neither occupation nor amusement, are subject to the unrelieved and continual presence of gloomy and dispiriting influences, have no opportunity at any time of associating with patients in the other blocks, are confined for exercise to narrow airing courts within high walls, and, in some six or seven instances, marked out for special example in even the class they form part of, are required to take such exercise alone. That this is not, in our opinion, an efficient way of dealing with mental disease, however complicated with criminal habits, and even dangerous violence, we conceive it to be our duty once more to put on record; but the same remonstrance, in effect, having been made unavailingly at every visit of the Commissioners since Broadmoor was opened, it is with no expectation of any kind of present result that we repeat it now, and proceed to show, by means of the full and careful returns with which we have been favoured by the courtesy of Dr. Meyer, its application to the existing condition of this class of the inmates of the asylum. The seven men already adverted to, as held to be exceptional, even in their class for dangerous violence, we found isolated in separate cells or cages, which some of them had not quitted for many months, rarely even walking in the airing courts under the restrictions imposed, and one of them refusing altogether to do so. One man who had lived in this way since the last Commissioners' visit, receiving, as most of the others are in the habit of doing, all his meals through an opening in the wall, had not even a chair or table in his room."

The comments of the *Pall Mall Gazette* on this paragraph are as follows :—

" Apart from the tendency, apparently quite irrepressible, in the Commissioners to indulge in fine writing and long sentences, there is something in these remarks which calls for notice; the more so as they add, " The same remonstrance having been made unavailingly at every visit, it is with no expectation of any kind of present result that we repeat it now." Now what has been said presents a picture sad and melancholy enough, and if it were to be taken as absolutely true we should be disposed to coincide with the Commissioners. But on reading the letter from the Council of Supervision of Broadmoor to the Secretary of State, we find that document gives facts and dates which, supposing them of course to be correct, argue something disingenuous in the Commissioners' report. " Nothing of this kind is now attempted at Broadmoor," they say. Now what is the real state of the case? Let us look at the history and antecedents of the seven men in question.

S. T. was admitted from Bethlehem in 1864. Had been repeatedly convicted of crime, and at the time of his becoming insane was undergoing ten years' penal servitude. He has since then three times tried to murder the medical attendant, has attacked and injured another officer, and openly expresses his regret that he has not killed Dr. G., and his intention of "caving in" the heads of others.

J. P., tried for murder and acquitted on the ground of insanity. Is stated to have been previously a thief. He has since 1864 made seven attempts to escape, accompanied with violent attacks on his warders. He has attempted and once succeeded in inducing other patients to co-operate with him. He is nevertheless now and has been for some time in association with others.

F. H. has attempted to escape, attacked a fellow-patient, also attacked the superintendent in chapel and injured him so as nearly to kill him. The other lunatics are unwilling to work with him on account of the terror he inspires. He openly states that he will murder the doctors the first time he has the chance.

J. H., habitual criminal, admitted from Milbank while undergoing five years' penal servitude. His attacks of mania come on without any premonitory symptoms, when he is very destructive and dangerous.

T. C. had murdered a fellow-patient in Lancaster Asylum. Since then he has twice violently attacked other lunatics, and contends that he hears voices commanding him to "kill somebody." He has often attacked his attendants, but since June, 1868, he seemed quieter, and is but rarely in seclusion.

W. T., habitual criminal, was undergoing fifteen years' penal servitude when he became insane. His conduct in various prisons has been uniformly bad; at Woking, Dartmoor, and Portsmouth alike. Was convicted of a revolting crime while on board ship as a convict in Portland Roads. Since his reception at Broadmoor he has been very violent, strikes and bites those whom he attacks, and has induced some of the other lunatics to combine with him.

No. 7, who had neither chair nor table in his room, has injured two other lunatics and an attendant, uses disgusting language, and has twice escaped. During 1868 the list of breakages against him are as follows:—Three plates, 3 mugs, 8 jugs, 112 panes of glass, 1 birdeage, 5 window sashes, 4 iron bars, and 1 door; and he destroyed 18 sheets, 3 pillow cases, 31 blankets, 8 counterpanes, 8 pillows, 8 mattresses, and 1 shirt.

Nevertheless he has been tried within the last eighteen months with every possible indulgence; he has been allowed to have pigeons, a small garden, a concertina, books, pictures, paints, carpenters' tools, but without success; and it simply endangers the lives of others to place him in association. The "cages" alluded to by the Commissioners are 29 feet by 7 feet 6 inches, and 36 feet by 13 feet, are lighted by windows and warmed by stoves. Now it seems to us that, so far from "no attempt being made now at Broadmoor" in the direction of indulgence and non-restraint, that system has been carried out further than humanity demands or prudence suggests. Even the other patients are afraid of associating with these men, and it appears almost fatuous for the Commissioners to go on year after year recommending that these lunatic convicts should be allowed a few more chances for killing or maiming the warders and medical officers of the hospital. Is there anything so admirable in their previous characters as to make it desirable to offer up sundry innocent and well-conducted men to their murderous fury? It is worth noting that in two instances they have induced other patients to co-operate with them. Now those who have

had much experience with the insane know that, as a rule, they are almost absolutely deficient in the faculty of combination, and we should be greatly disposed to believe that the insanity, or what might appear like it, may be mostly ingrained ferocity unrestrained by fear of punishment, the insanity being assumed in order to obtain the privileges of a lunatic—*i. e.* seclusion, as against stripes. Again, insanity is a disease which usually excites great compassion because it deprives the patient of liberty, of power to work or to do good, and destroys the pleasures of memory and of hope. But we need hardly pity the hardened and habitual criminal who becomes insane more than as if he had any other malady. His liberty he has already forfeited; he never does any honest work except in prison, and in his case the pleasures of memory and hope are simply the recollections of successful vice and crime, and the hope of returning to his ordinary habits as soon as possible. As the council truly observe, “in these cases the element of lunacy is not to be so much considered as the element of vice, low cunning, and the habits of convict life.” Being declared lunatics, they are quite aware they will not be punished except by seclusion. Every means of reform has been tried and tried in vain. So far as they are insane it does but remove any restraint which they might have been made to practise, and only serves to expose the full and active depravity of their characters.”

We have given the report of the Commissioners and the reply of the *Pall Mall Gazette*, as advocate for the Council of Supervision, in full, that our readers may have the material for personally forming a judgment on this question.

We cannot accept the *dictum* of the *Pall Mall Gazette* that Broadmoor is a government establishment combining prison and hospital in one. Broadmoor is a lunatic hospital, and in no sense of the word a prison, and prison management is out of place within its walls. The inmates there have been each declared by the verdict of a jury to be of unsound mind, and, thus afflicted with disease, they have been sent for medical care and treatment to the State Asylum. This asylum contains every requisite for the modern treatment of the insane, has a highly paid medical staff, and each patient under treatment costs the country more than double the price of maintenance in our best conducted county asylums.

We are not objecting to this additional cost; on the contrary we believe it may be necessary for the proper treatment of the grave forms of mental disease sent to Broadmoor. Only we do say, as against the Council at Broadmoor and their advocate in the *Pall Mall Gazette*, that this great expenditure on buildings, fittings, and on a highly paid staff has not all been incurred solely that the old disused repres-

sive treatment of the insane should there be re-introduced. Any ignorant lay speculator in lunacy, of the old type, could manage matters by this method in the courts and outhouses of his tumble-down mansion, much as they now appear to do at Broadmoor.

The Commissioners' statement is, that violence of conduct is treated there solely by seclusion, and that if a patient has given proof of being dangerous he is isolated altogether, and they say, and it is not denied by the Council, that seven cases held to be exceptional, even in their class, for dangerous violence, they found isolated in separate cells or cages, which some of them had not quitted for many months, and they further instance one man who had lived in this way since the last Commissioners' visit, receiving, *as most of the others are in the habit of doing, all his meals through an opening in the wall,* without even a chair or a table in the room. The Commissioners remark, and we most strongly concur in their opinion, that this is not an efficient way of dealing with mental disease, however complicated with criminal habits and even dangerous violence. The Council reply by giving a history of the seven cases, which is quoted in the *Pall Mall Gazette*. They also give a list of the breakages in 1868 by one of these patients. We do not consider the list very excessive for their worst case, and there are many contrivances in asylums by which these can be obviated or lessened. Of the revival at Broadmoor of the old method of feeding the worst cases by placing food in a trap door or hole in the wall, the Council merely say that it has been found "a great convenience." We differ from this opinion. We call it a great slur on the English non-restraint system of treatment.

The "cages," or "cells," may be large and well warmed, nevertheless the Commissioners' statement, that it is contrary to the modern treatment of insanity to place dangerous and destructive lunatics in permanent seclusion, and without exercise or amusement, will be endorsed by every medical superintendent of our County Asylums. The *Pall Mall Gazette*, in an able review of the life of Dr. Conolly, said, with great truth, that "to dispense with mechanical restraint means a good deal more than to put away iron chains, and handcuffs, and immovable wooden chairs. It means more room, more freedom, better buildings, surrounded by pleasure grounds, instead of court-yards enclosed by high walls; above all, it means a larger staff of better paid attendants, of superior intelligence and temper to discharge the duties connected

with the insane." All these things the nation has lavishly provided for the treatment of the criminal lunatics at Broadmoor; the Council revert to the moral influence of solitude.

Sir James Clark records in this biography of Dr. Conolly that "a desponding state of mind to which Dr. Conolly was at times subject led him to fear lest the selfish interests of mankind might lead to a reaction, and that much of his work might after all be lost to the world." Had Dr. Conolly lived to read this Parliamentary Paper on Broadmoor, and the article in the *Pall Mall Gazette*, he might have indulged his fears of a reaction against the non-restraint system (in the wide sense in which he held it), without justifying the idea of his biographer as to this opinion owing its origin to his desponding state of mind.

The "North British Review" on the Alleged Increase of Lunacy.

In the March number of the *North British Review* will be found an able paper on "The Increase of Lunacy." The writer travels over similar ground, and deals with much the same figures, as Dr. Lockhart Robertson did in the paper he read in January, at the second quarterly meeting of the Medico-Psychological Association. The *North British Reviewer*, after quoting the figures thus already familiar to the readers of this Journal, arrives at the conclusion "that there is an enormous increase in the numbers of the insane in asylums; that this increase is steadily progressive, and gives no indication of a tendency to pause; that the demand for admission into asylums is greater than it was; that the increase of the population accounts for much of this, but not for the whole; and that the part so unaccounted for is not such as to indicate any marked growth in the people's liability to insanity."

The Reviewer then proceeds to discuss the important question whether this yearly increase in the numbers of the asylum inmates—the result of the yearly accumulation of incurable cases*—may not be met by a more extensive system

* The increase of the insane in asylums admits of a more simple explanation than the theory of the alleged increase of lunacy. Of every 100 patients admitted in a given period into an asylum, it is evident that a certain number must remain over to swell the numbers, viz., the difference over the discharges and the deaths. In the decennium 1858-68, not every one of the 90,000 lunatics admitted into the

of discharge of the chronic cases of mental disease. "The great bulk (he writes) of the pauper inmates of our asylums consists of chronic and incurable cases, many of whom are quiet and harmless, and the continuing growth of the population of our asylums results from an accumulation and storing up of this class of the insane. If, then, the growth is to be checked, and the pressure for asylum accommodation relieved, one of the ways by which we may hope to accomplish this must be by a larger withdrawal of the incurable, or in other words by an increase in the discharges of the unrecovered. There are difficulties, however, in the way and in practice, and these are neither few nor trifling." The remainder of this Review is devoted to the discussion of the method and means of transferring a certain proportion of the chronic insane from the wards of the county asylums to (1) buildings intermediate in character between the workhouse and the county asylum; (2) transference to the workhouse itself; and (3) transference to private dwellings.

There is again a great similarity between the Reviewer's remarks on this subject, with those laid before the Medico-Psychological Association in 1867, by the President in his Address on *The Care and Treatment of the Insane Poor*. There can be no question of the pressing importance of this subject, and we are gratified to find it thus lucidly and fairly discussed in the pages of the *North British Review*.

English asylums was removed (recovered or relieved) or died. A certain number remain. In examining the official returns of these years, this remainder is found to be, in round numbers, 10,000, or as near as possible the increase in the numbers of the English asylum population during the same period. The actual numbers are thus:—

	1858-68.		
Total admissions	91,731.
Total discharges	52,649.
Total deaths	28,276.
<i>Total remaining</i>	10,806.

Or of every 100 patients admitted during the decennium 57.4 were discharged, 30.8 died, and 11.8 remain in the asylums. The increase in the population of the English asylums during the decennium 1858-68 was 10,421 (table IV.) ; the difference between the discharges and death is 10,806 and represents, therefore, the whole of the increase. I might almost herewith conclude my remarks, and say, that I had now demonstrated that no increase of insanity, as tested by the numbers in the English asylums, has occurred in this decennium."—*The Alleged Increase of Lunacy; being a Paper read at the Second Quarterly Meeting of the Medico-Psychological Association, held at the Royal Medico-Chirurgical Society, January 28, 1869*, by C. Lockhart Robertson, M.D., F.R.C.P.

Recent Prosecutions by the Commissioners in Lunacy.

The following letter appeared in *The Times* of the 31st of August, from the solicitors to the Commissioners in Lunacy, with reference to three recent prosecutions instituted by them for the ill-treatment of lunatics :—

To the Editor of the "Times."

SIR,—The great interest naturally felt by the public in the treatment of lunatics, and the desirability that the provisions and administration of the law for the protection of the insane should be correctly understood, induce me to ask the favour of you to grant me space briefly to remark upon three prosecutions instituted by the Commissioners in Lunacy for ill-treating lunatics, which have been reported in your paper during the present month.

The first is the case of William Horn, who was summarily convicted by the magistrates in petty sessions at Plympton for having cruelly beaten and otherwise ill-used a lunatic named Snowden. This harmless creature was in charge of Horn, who, after having nearly strangled him, handcuffed him and tied him to a tree, where he was kept for over three hours, until liberated by a neighbouring magistrate. From the brief report of this case given in your columns, it might seem as if the magistrate, by inflicting the merely nominal fine of £2, had admitted it to be a good defence for Horn that stripes and chains were necessary to show lunatics their masters. But the fine really inflicted was £10 and costs, which, though too small for an offender even in Horn's station of life, would unavoidably have subjected him to the alternative of two months' imprisonment if it had not been paid in court by the person who employed him—the son of the lunatic he had so cruelly treated.

The next is the case of Robert Dixon Smith, who was tried before Mr. Baron Cleasby at the late West Riding Assizes. The charge against this defendant was for having illegally imprisoned in his house, at Bradford, one Mercy Wood, a lunatic, for a period of two years, and wrongfully possessed himself of money belonging to her to the amount of between £400 and £500. The Commissioners in Lunacy, by whom this prosecution was ordered, directed, in the most explicit terms, that it should not be compromised, but that the matter should be left to the judgment of the Court. These instructions were communicated by me to the local agent to whom the conduct of the prosecution was intrusted, and I regret to say that, in disregard to them, the defendant was allowed to plead "Guilty" on the terms merely of handing over to the lunatic's brother the money of which Smith had obtained possession, and entering into recognizance to appear and receive judgment if he should be called upon to do so. The presiding

Judge remarked at the same time that "he could not help thinking the prosecution had dealt very leniently and favourably with the defendant, and they, no doubt, had reasons for doing so." So far from this, the Commissioners, before the trial, had refused their sanction to the proposal for such a compromise made by the brother of the lady; and the result that followed they regard as a most grievous failure of justice arising from the wilful disregard of their express directions.

The third is the case of Henry Black, who was committed by the magistrates at Loughborough on Thursday week for trial at the ensuing spring assizes—first, for taking charge of a lunatic without having obtained the proper order and two medical certificates; and, secondly, for cruelly illtreating the lunatic. As this case is not yet tried, I will say nothing of the facts, but I beg permission to correct your reporter's misapprehension of my statement of the law in regard to what are called single patients. It is of the highest importance, both to the patients and their friends, that what the law really is on this subject should be rightly understood. What I am reported to have said as to a "licence" being required for any house in which one person of unsound mind is kept for profit, is quite incorrect. An insane person may be taken care of privately in a house in which there is no other person similarly afflicted; and if this be done by some relative, friend, or other person who derives no remuneration from the charge, the lunacy law does not interfere further than to see that the patient is not ill-treated or wilfully neglected. On the other hand, if the patient is placed in the custody or charge of any person who thereby is to derive remuneration, such person, though under no necessity to obtain a licence for his house, is bound, before receiving the patient, first to obtain an order and two medical certificates, and next to acquaint himself with, and very strictly observe, certain other responsibilities, involving immediate returns to the office of the Commissioners. Any statement of these, which are always communicated to parties in this position, I need not here go into, as my object on the present occasion is merely to explain that the former of the two complaints preferred against the defendant Black is the taking charge of an insane patient for profit without having first obtained an order and medical certificates.

Trusting that you will see in the importance of the subject an apology for my request to have this letter published,

I am, Sir, your very faithful servant,

H. S. LAW.

For Vandercom, Law, and Co., Solicitors to the
Commissioners in Lunacy.

Bush-lane, London, Aug. 30.

PART II.—REVIEWS.

A Memoir of John Conolly, M.D., D.C.L.; comprising a Sketch of the Treatment of the Insane in Europe and America. By SIR JAMES CLARK, Bart., K.C.B., M.D., F.R.S., Physician in Ordinary to the Queen. London: John Murray, 1869.

“When the grave has closed over a man, the greater part of whose life has been devoted to works of benevolence which have conferred a lasting benefit upon mankind, it is (writes Sir James Clark, in his preface to this Memoir) due to his memory that the public should be reminded of what he did, and of how he achieved his high objects. Such a man was Dr. John Conolly, and it is the purpose of the following Memoir to give an account of his works, especially of that great work which has ranked him among the benefactors of his race.” It cannot but be gratifying to the members of the Medico-Psychological Association to find the work in which they are themselves engaged, now placed in its fair light before the public by the distinguished court physician, whom they have the honour to rank among their honorary members. And to Sir James Clark the credit is, indeed, great thus to spend a portion of his well-earned leisure and retirement in rearing so noble a monument to his departed friend as this record of his great work; the story “of what he did, and of how he achieved his high objects,” told in its working, and in its results throughout the civilised world, in that simple, unaffected style, which has already gained for it the praise of the English press, and the marked attention of the reading public.

In the pages of this Journal* for April, 1866, we recorded that on the 5th March, 1866, at Lawn House, Dr. John

* Early in the morning of the 5th of March last, at the Lawn, Hanwell, after a brief illness, entered into his everlasting rest, aged seventy-one years, John Conolly, M.D., D.C.L. On the morning of the previous day he had sunk down on the floor and been unable to rise, though without being insensible. For a short time afterwards he had some difficulty in expressing himself; he could not always find the right word, but occasionally made use of a wrong one; all the while being quite conscious of his difficulty, and painfully anxious to assure

Conolly entered into his everlasting rest, aged 71, and in the following number, we published a brief memoir of his life (*Journal of Mental Science*, July, 1866), the facts of which are, therefore, familiar to all our readers. They are related more at length in the first four chapters of Sir James Clark's memoir.

The following picture of Dr. Conolly, as Visiting Physician at Hanwell, written by his valued friend, Dr. Hitchman, must not be omitted here :—

"Dr. Conolly visited the Asylum twice a week, spending the greater portion of the day at each visit. His interest in the patients seemed never to flag. Even cases beyond all hope of recovery were still objects of his attention. He was always pleased to see them happy, and had a kind word for each. Simple things which vainer men with less wisdom would have disregarded or looked upon as too insignificant for their notice, arrested Dr. Conolly's attention, and supplied matter for remark and commendation, e.g., a face cleaner than usual, hair more carefully arranged, a neater cap, a new riband, clothes put on with greater neatness, and numerous little things of a like kind, enabled him to address his poor illiterate patients in gentle and loving accents, and thus woke up their feeble minds, caused their sad faces to gleam with a smile, even though transient, and made his visit to the wards to be longed for and appreciated. Dr. Conolly rejoiced in acts of beneficence. To be poor and to be insane were conditions which at once endeared the sufferers to him, and when the insanity was removed and the patients left the Asylum he generally strove to obtain some pecuniary aid for her from the 'Adelaide Fund' (a fund originated for the relief of discharged patients), and supplemented this very often indeed with liberal donations from his own purse. I believe that he gave away large sums of money in this manner.

"I was not associated with the doctor when he first introduced the non-restraint system; but the older attendants of the Asylum, on both

those around that he was perfectly sensible of their presence and of all that was said. It was very characteristic of that careful attention to propriety of language, as well as of the extreme courtesy which distinguished him throughout life, that he grieved and apologised for his inability to express himself correctly, even when he was expressing himself quite well. His longing desire was to be at rest, and his earnest hope, that he might not recover from this attack as he had recovered from former like attacks. "I have only one wish," he exclaimed—"to die; but God's will be done." In the evening he had quite recovered his power of expression, spoke cheerfully, and uttered many kindly wishes, still praying that he might not recover, though fearing that he might. At three a.m. of the following morning he was attacked with paralysis of the right side and violent epileptiform convulsions, which followed one another in quick succession for two hours; he was quite insensible, and when the convulsions ceased he passed gently away, as one who falls to sleep after a long day's labour. His body is buried in the Kensington Cemetery at Hanwell. His name liveth for evermore.

—*Journal of Mental Science*, April, 1866.

sides of the Institution, spoke often to me of his ceaseless vigilance during the early years of that great experiment, of his visiting the wards at all hours of the night, and frequently more than once, walking noiselessly along the corridors, in slippers especially made for this purpose, thus keeping the 'night attendants' to their duty, and ministering in various ways to the comfort of the restless, sleepless patients under his care. He was, indeed, a noble enthusiast, in the best sense of the term. His work was a labour of passionate love, and his language, therefore, was also fervid. Thus he wrote to me, 'I feel grateful to God, who has entrusted duties to me which Angels might stoop to perform.' He had, however, in common with all men engaged in great duties, his moments of despondency. He was also a great sufferer from an irritable chronic skin affection, which often deprived him of much sleep at night and irritated him during the day, and this caused him to appear impatient and excitable by officers and others who knew not, or could not, appreciate the corporeal conditions and mental anxieties which produced the feeling. He was in truth, at all times supersensitive, reminding one too frequently of Burns's pathetic lines—

‘Chords that vibrate sweetest pleasure
Thrill the deepest notes of woe.’

“ I write, *currente calamo*, but I think I have answered briefly all your enquires. His letters to me refer too much to persons now living to admit of publication, moreover, many I regard as private and sacred; but the one he penned to me from his sick chamber, not long prior to his death, was so encouraging to myself, and I think so characteristic of a faithful Christian man, that I cannot forego the pleasure of transcribing its closing sentences for your perusal:—‘I hope you and Mrs. Hitchman are well, and free from earthly discomfort, happy I would say in doing no unimportant work. I am free from suffering and quite resigned to live as long, or to die as soon as God pleases; thankful to have lived; truly lamenting that my life has been so little worthy of the ever good Giver, but never despairing.’

“ ‘Being dead, he yet speaketh,’ not only by his writings, but in the public lunatic asylums of this and other lands. His personal reputation, the fulness and lucidity of his Hanwell Reports, and more especially his practical work on the Construction and Government of Lunatic Asylums, caused him to be much consulted by County Magistrates, architects, and others, who were contemplating the erection of Lunatic Asylums, and thus he became a great agent in displacing the gloomy ‘Madhouse’ of the past, and in supplying appropriate hospitals for the treatment of the insane. Dr. Conolly educated the public mind, and taught it to know that a good house and a pleasant site were essentials in a restoration of a disordered mind, and now almost

every county in England is provided with a lunatic hospital formed on the general principles advocated by him. These hospitals stand on many a beautiful hill, alike monuments of his fame, and of the Christian benevolence of the English people.

"The retrospect of Dr. Conolly's friendship is most pleasing; a friendship never suspended for a passing moment during the five years we were associated in office, or indeed, ever afterwards. It was a pleasure and honour to know so great and so good a man."

In furtherance of his design of comprising in this Memoir a sketch of the treatment of the insane, Sir James Clark refers in the fifth chapter to the difficulties which beset Dr. Conolly's path while engaged in his great work of introducing the non-restraint system at Hanwell. He prints the following letter of Dr. Conolly's addressed to Dr. Bucknill (January 31, 1856), giving his own story of these trials:—

"I have been wishing to write to you for some weeks, but occupations which in my state seem many and great, have devoured my time or exhausted my energy, day after day. Also I am preparing the volume on "The Non-Restraint System," which has made a reference to my diaries and manuscripts innumerable (the work of the last sixteen or seventeen years) a necessary labour, and it has occupied much more time than I expected. These records would furnish a curious commentary on some recent attacks made on me. The fact is, I did not immediately succeed Sir Wm. Ellis. He resigned in 1838, and at the election the casting vote of the chairman (the late Colonel Clitherow) excluded me in favour of Dr. Millingen. Some time afterwards Col. C. told me that my exclusion was occasioned by my politics! In 1839, on the resignation of Dr. Millingen, I was elected by a large majority. Dr. Millingen denounced non-restraint and the system, and all the friends of the Ellises misrepresented me. Certainly I found no commencement of non-restraint in the asylum. In every ward there was a closet full of restraints, and every attendant used them at will. Many patients were always in restraint. Six new restraint chairs had recently been added to the stock, making forty-one. Within four months all this was done away with; but I was cruelly persecuted, and many friends of the old system were my enemies to the last. For two years Serjeant Adams was a staunch friend and most able defender of the new system, upon which I had repeated conferences with him immediately after my election. Your question has led me to what I have said. The troubles to which I have alluded are now of no consequence. In my book I shall scarcely allude to them at all, and I shall very temperately touch on the old faults of Hanwell; I wish to view the subject as it will be viewed by others now and in years to come. For any service that I did I have been generously repaid by public opinion, and by that of our own profession, which I chiefly value."

We had marked several interesting extracts in this Memoir, especially a letter from Dr. Gull relating his impressions of Dr. Conolly's clinical teaching at Hanwell, and another from Dr. Langdon Down, speaking of Dr. Conolly's encouraging presence and all-pervading influence at the Board of the Earlswood Asylum, but our limits compel us instead to refer our readers to the Memoir itself.

The following letter by Dr. Conolly written in his declining years to his friend, M. Battel, is full of his own peculiar grace :—

“ It seems long since I had the happiness of receiving one of your friendly and charming letters. To hear from you again, and to be assured that you are well, will be a real consolation to me. I am conscious on my own part that I ought to have said this long ago, and my excuse must be, in part, that in the last two years the cheerfulness which would have prompted me to write to you has sustained many assaults, which, although they have not overcome me, have often saddened me, and caused me to refrain from troubling my esteemed friends with my thoughts. And amongst these friends, be assured, my dear Monsieur Battel, you hold a high place, and will always do so whilst I remain among the living. The year 1861, and the commencement of the present year, have deprived me of *many* friends known to me from my earliest days. One of the last died in April; and a dear daughter of Dr. and Mrs. Tuke, after a short illness, soon afterwards. This last event caused me especial grief, for I loved the dear child extremely. The next morning it would appear that I had an attack of cerebral congestion, which made me insensible for some hours. Happily it left no paralysis, and no mental disorder, but I feel weak, and indisposed to any long continued mental exertion. I am now resuming my ordinary occupations, but, to say the truth, with some feeling of regret. After a few weeks of tranquillity, I feel unwilling to return into the world, which has now very few attractions for me.

“ Whenever I am ill and tranquil, I have a singular pleasure, as I must have told you before, in reading French. The language is associated in my mind with the early days of my life, and my earliest studies. For the last few weeks I have been delighted to look again at an old copy of the ‘ Lettres de Messire Roger de Rabutin, Comte de Bussy,’ &c.; and from these I have turned to a much prized book, given to me by your good self, the ‘ Memoirs, &c., &c., of the Marquise de Sévigné,’ by Walckenaer, in which I only find one fault, that I go on reading it too long, unwilling to close the book. Finding in one volume an account of Mme. de Sévigné’s journey down the Loire, I was enchanted to read a description of some localities on the borders of the Loire which were once familiar to me. Mont Louis and Veretz, near Tours, I remember well; and the expressions of praise in the letters seem to me not exaggerated: ‘ le pays est le plus charmant qu’.

aucun autre qui soit sur la terre habitable.' The cottage in which I lived in 1818 is beautifully situated on the right bank of the Loire, opposite Tours, and has acquired subsequent celebrity as the residence for a time of Béranger. It is called the Grénadière, and a pomegranate tree grew over the front of it. Of that agreeable cottage I have some descriptions written on the spot. I shall, however, content myself to referring you to the 'Dernières Chansons de P. J. de Béranger,' p. 103, 'Les Oiseaux de la Grénadière.' But I must suspend these retrospections of an invalid, relying on your indulgence I shall be impatient to hear that you are well, and you will tell me also of the health of M. Falret, whom we both much esteem."

A letter from Dr. Conolly to Sir James Clark, in reply to one suggesting that he should write his views more fully than he had hitherto done on the insanity of old age, will be read with much interest:—

"Dec. 8, 1862.—I have been meaning every day to acknowledge your most kind letter of the 29th ult., but I fear I must myself be feeling one of the diseases of age pervading me, for I have days of langour now and then, which, when the day is gone, make me unable to account for how it has been spent. It is rather curious that the subject of the delusions of old age, concerning which you enquire if I have written anything, has been lately and often the particular subject of my thoughts. For many years past I have kept rather full records of cases occurring in my practice, and I have got a sort of alphabetical list of them; but to consider them in various classes—as insanity in children, and at the age of puberty, and in middle age, and in decline, &c.—seems a task I can hardly hope to accomplish. The children's cases were despatched in a few papers called "Recollections," in the "Medical Times," early this year; but then came an illness, I fear a temporary congestion of the brain, in April, and I have not thought it prudent since to write for the press. Now, however, I hope to go on, although very cautiously, and my next papers will be on the subject of senile insanity. I have some curious cases, and your remarks will not be lost upon me. It is too evident that the brain loses its general energy as the body does; but it seems as if certain portions of it decline differently in different persons, and the actions of other portions becomes uncontrolled. Forgetfulness of words, of dates, of people, of things read and things once carefully done and written; dread of poverty, visions of wealth; foolish attachments and dislikes; strange delusions founded on dreams, and sometimes the oddest singularities. These things are very curious, and phrenology, which seems forgotten, appears the only doctrine which tends to explain them.

"Perhaps the wonder is that any of us retain cheerfulness, for the

loss of our friends is inevitable and dreadful, and whatever we do or think of the hopes that cheered us no longer animate us to exertion. It is still a great blessing to retain one's mind, and to feel tranquilly assured that whatever has happened, and whatever is to follow, has been and will be regulated by a first cause—all wise and all good. In our profound darkness as to the kind of existence that will follow this brief and transitory state, the hope and belief that our best affections will form its happiness seem inherent, and as it were instinctive to us. Our great Creator surely did not implant these hopes in us to mock us. Certainly as we approach the end of this mortal life we feel more and more that we are gradually becoming detached from it. The body slowly perishes, and will not let the mind act freely, but the consciousness that the mind is still living, and capable of living, seems never to fade."

We might multiply to any extent extracts from this charming volume, so full of interest to all engaged in the study and practice of psychological medicine. Doubtless few of our readers will fail to avail themselves of the intellectual treat with which Sir James Clark has in this Memoir provided us.

Le Ramollissement et la Congestion du Cerveau, principalement considérés chez le Vieillard, par le Dr. J. V. Laborde.
Paris : Delahaye, 1866.

M. Laborde's book is so very suggestive to every student of cerebral diseases, that no apology is needed for calling the attention of our readers to certain points which do not appear to have been noticed anywhere in their connection with ordinary insanity and general paralysis.

As to the pathology of chronic softening, M. Laborde establishes, in opposition to Durand Fardel, that when not produced by local inquiry, it occurs almost invariably in persons above the age of sixty. The link between this disease and old age seems to be an alteration of the cerebral capillaries which M. Laborde has found distorted (usually with bead-like dilatations) in every brain of an old person which he has examined. He ascribes this change to fatty degeneration of the vascular walls, and looks upon it as the earliest sign of the disease; there are next observed gradual blocking up of the capillaries by accumulated fatty or calcareous molecules and more or less complete rupture; the results of which changes are, small extravasations of blood, and arrest of the local circulation.

The nervous elements of the brain suffer *pari passu* with the vascular ones, the cells of the grey matter separate from their nuclei and break up, while the nerve-tubes become varicose, split transversely, and unrecognizable. At last only a few fragments of capillaries and of nerve-tubes, mixed with altered blood-discs, haematin, and granular or fatty molecules are to be distinguished. It is hardly necessary to point out that this account of the pathological anatomy of chronic softening has a very close connection with that history of the alterations of the grey matter in cases of mental disease which Dr. W. Sankey has especially put forth. In both disease of the cerebral capillaries is the primary anatomical fact.

The mental phenomena of chronic softening, when carefully examined, are equally instructive. Physicians have hitherto been content to describe these as consisting only in a gradual loss of the intellectual powers, especially memory; and the course taken by this gradual dementia has been followed with some care.

M. Laborde, however, points out that there are sometimes cases in which there is distinct mania; as this is usually of only short duration it has hitherto been little noticed. The most interesting form of this mental affection is a "*délire ambitieux*," exactly like that characteristic of general paralysis. The author gives a detailed account of two such cases, and in one of them there was thickness and difficulty of speech, although no true lingual paralysis. In other cases there will be common maniacal delirium, with great restlessness and violence; such states are generally only temporary; in some instances there is true melancholia, usually passive, but occasionally with suicidal tendencies. Special hallucinations are on the whole rare, and, when they do occur, seem to be connected with alcoholism. The writer of this notice, having had particular opportunities of observing chronic softening, can decidedly endorse some of these statements. It appears to him that the ordinary mental state in such cases is usually that of melancholia, and there is generally a difficulty of speech of the same kind as that noticed in general paralysis. In one case he noticed violent attacks of acute mania, occurring at irregular intervals, and lasting a few hours; and in another, noisy chronic delirium (closely resembling that which is often seen at the end of cases of general paralysis) came on some weeks before death. The similarity between these symptoms and those of general

paralysis is very interesting, but can hardly give rise to any difficulty in diagnosis, if the difference in the course of the two diseases be kept in mind. In general paralysis we have to do with an affection which spreads rapidly over the surface of the brain, and where the mental symptoms, therefore, generally develope themselves more decidedly, while the kindred morbid change of softening extends rather to the central portions of the brain, and is accompanied by true motor paralysis.

As to the treatment of this affection, the writer is convinced by his own experience that the only medicine which has any favourable effect, is arsenic. He was originally inclined to adopt the theory which considers this drug to be a direct food for the nervous system, as replacing phosphorus; but M. Laborde's researches as to the nature of the disease show how the known effects of arsenic on the capillaries elsewhere are sufficient to account for its usefulness in this case. Cod-liver oil is the only other article in the *materia medica* which is beneficial; iron and quinine have appeared to the writer to do harm rather than good.

Acute attacks of an apoplectic character, occurring in the course of this disease, are generally relieved by a *single* leeching or cupping to the nape of the neck; zinc and belladonna seem to have more effect than arsenic or any other remedy in restoring the patient, after one of these fits, to something like his previous state. Henbane and Indian hemp will usually allay mental excitement and restlessness; patients who are subject to these should have abundance of good nourishing food, but little or no alcoholic stimulants. In this disease, as in general paralysis, alcohol appears to excite, rather than to soothe, the nervous system.

J. R. G.

Gheel, the City of the Simple. By the Author of "Flemish Interiors." Chapman and Hall, London, 1869.

In laying this book down after reading it, we must plead guilty to mingled feelings of disappointment and bewilderment—disappointment, that after the glorious promise of the preface, that the book would "reveal to alienists a secret after which their hearts must have long yearned," we find nothing that has not been described "many a time and

oft" already, from the time of Esquirol to the present,—and bewilderment as to whether the book is meant for a sensational tale, written to sell, or is really intended and believed by its author to be of a scientific nature.

Reluctantly we have been compelled to come to the latter conclusion, for, in offering it to the British public, the author says he is "animated by the hope that it may find its way into the hands, among others, of those who are unhappily so placed as to bear the responsibility of caring and providing for the mentally affected."

This would be laughable, if it were not evident that the author really believes what he is writing; but does it not forcibly demonstrate the maxim that a "little knowledge is a dangerous thing?" The author really believes he has made a great discovery. He is evidently ignorant that the literature of Gheel is already great, and that the merits and demerits of the system there pursued have been discussed *ad nauseam* in every psychological society, journal, and work in the four quarters of the globe. In his self-conceit he owns that he has never until lately heard of Gheel, and, therefore rushes to the conclusion that all the scientific world is equally ignorant with himself.

This would, however, be a small matter, were the book simply another addition to the many accounts already written of the colony of Gheel, but when the author goes out of his way to attack the English county asylums, backs up his attack by inaccuracies and misstatement of the most glaring nature, and contradicts himself over and over again, we feel that the public should be disabused of some of the prejudices this book must necessarily foster.

Throughout the whole book it is evident that the author is a layman, and utterly ignorant of the literature, practice, and treatment of insanity. In the preface he writes—"I honestly believe there is not a country in civilised Europe, and not a lunatic asylum, perhaps, in Belgium itself—with the exception of Gheel—where humanity is not, occasionally, more or less grievously outraged."

Does not such a sentence as this stultify itself. We are asked to believe that 800 lunatics farmed out among some hundreds of ignorant peasantry, with only occasional supervision, are never subjected to the slightest inhumanity, although the author himself owns that many of the patients are manacled by the feet, and that instruments of restraint are common.

Apropos of our author's idea of humanity, we would ask him to study the following sentence from Dr. Sibbald's very temperate and convincing article, *The Cottage System and Gheel*, published in *Journal of Mental Science*, January, 1862 :—

"Demented patients, of dirty habits, form a considerable proportion of the population, and, from what I saw, I have no doubt of the impropriety of subjecting them to cottage treatment. Proper attention to them at night is impossible; and I satisfied myself by observation, that their beds are by no means so cleanly as those of similar patients in any well-regulated asylum. The condition of these patients during the day must also be unsatisfactory, as there are no baths in which they can receive that thorough daily cleansing which is indispensable for their health and comfort."

Moreover is he aware that the ordeal of St. Dymphna is still occasionally practised on patients.

The author of *Gheel*, the City of the Simple, waxes very eloquent on the delights of *Gheel* for the mentally afflicted in comparison with the prisonlike feelings our own asylums produce. And in making this comparison he takes *Hanwell* as his example. Now far be it from us to detract from the good work that has been and is still being done there; but *Hanwell* is an old institution; it has been gradually added to until it has become of enormous and unwieldy dimensions, and probably the *Hanwell* authorities would be the first to ridicule the idea of its being brought forward as the model of our English county asylums. Yet this is what we find done in this book, and after that the author can scarcely be surprised if English psychologists view his other conclusions with suspicion.

And after all, this *Gheel* colony is somewhat of a sham. Its advocates dwell much on the manifold advantages of its treatment. They tell of the comparative freedom from accidents, suicides, pregnancies, &c., its statistics show, and contrast them favourably with the statistics of our English asylums—and no doubt so far they are right. But it should also be remembered that by Article 27 of the laws governing the colony all really troublesome or dangerous patients are excluded from admission. The law is* "There may be placed in the commune of *Gheel* lunatics of all classes, except those who require continual restraint or coercion; suicidal, homicidal, and incendiary lunatics—those whose escapes shall be

* Dr. Sibbald—op. cit.

frequent, or whose disease is of such a nature as to infringe upon public peace or decency." Moreover, of these picked patients that are admitted, Dr. Sibbald tells us 68 are restrained in some way, 100 are in a large building called the hospital, in other words an ordinary asylum, as being unfit to be at large in the village, and the Medical Superintendent has the power of sending any troublesome or violent patient away at once. But the author of *Gheel, the City of the Simple*, almost entirely ignores these facts. Surely, therefore, Gheel is no such great wonder, if we remember that it contains the picked lunatics of a populous country like Belgium. Possibly we may be letting the author into another secret when we tell him that England is one vast Gheel. That only the dangerous lunatics of England—"the suicidal, the homicidal, and incendiary lunatics"—are confined in our asylums. If he looks into the last report of the Commissioners in Lunacy he will find that 11,181 are in workhouses, and 6,987 are boarded out with relations or others. It may still fairly be discussed whether this arrangement is not the best. The working of Gheel itself shows that there are many classes of lunatics unfit to be anywhere but in Asylums, and notwithstanding the sweets of liberty so eloquently descanted on in the work under consideration, it is a very generally received opinion amongst those best able to judge that the restraints of an ordinary English Asylum conduce greatly to cure in recent cases of mania and melancholia. To the chronic and harmless lunatics by all means grant every liberty and indulgence possible, but let us not by a false sentimentality relieve the incurable at the expense of the curable.

In conclusion, we must in justice record that the book is got up in the best style, that it is written throughout in a manner extremely fascinating, and in English of the purest.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

NOTE.—*The length of the Report of the Proceedings at the Annual Meeting compels us to omit the usual Quarterly Report on the Progress of Psychological Medicine.*

PART IV.—PSYCHOLOGICAL NEWS.

Proceedings of the Twenty-fourth Annual General Meeting of the Medico-Psychological Association, held in the Museum of the Philosophical Society of York, on Monday, August 2nd, 1869, under the Presidency of PROFESSOR LAYCOCK, M.D., F.R.S. Edin.

AGENDA :—

- I. Meeting of the Council, at 10 a.m.
- II. Morning Meeting of the Association, at 11 a.m.

1. Address by the retiring President (*W. H. O. Sankey, M.D.*)
2. General Business of the Association.

The following Resolutions and Letters have been received and will be considered :—

- a. Letter from *Mr. Gascoyen* relative to the proposed union of the Association with the Medico-Chirurgical Society; *Dr. Tuke* will move, and *Dr. Robertson* will second, a Resolution that a Committee be appointed with instructions to carry out the amalgamation in the way they find best.
- b. Letter from *Dr. Flynn*.
- c. Vote of Letter of Condolence to the family of the late *Professor Griesinger*.
- d. Report of Committee as to the state of Criminal Law in relation to Insanity.
- e. Report as to the transactions of the Quarterly Meetings.

- III. Afternoon Meeting of the Association, at 2 p.m.

1. Address by *Professor Laycock*, President.
2. *W. B. Richardson, M.D.*, F.R.S., will read a paper on "Physical Degeneracy from Excessive Mental Strain."
3. *Lockhart Clarke, M.D.*, F.R.S., will read a paper on a "Case of General Paresis," and exhibit Microscopical Preparations of the Brain and Spinal Cord.
4. *Daniel H. Tuke, M.D.*, will read a paper, entitled "An Apology for Lord Brougham on Psychological Grounds."
5. *James Sabben, M.D.*, will read a paper, entitled "The consideration of Ritualism with reference to its influence on Insanity."

The Council met at 10 a.m.

THE MORNING MEETING

of the Association was held at 11 a.m. The following members of the Association and Visitors were present :—

Members—*Dr. Sankey, Dr. Laycock, Dr. Tuke, Dr. Robertson, Dr. Christie, Dr. Skae, Dr. Tuke (of Fife), Prof. Gairdner (of Glasgow), Dr. Sibbald, Dr. Stewart, Dr. Arlidge, Dr. Davey, Dr. Wood, Dr. Caleb Williams, Dr. W. B. Richardson, F.R.S., Mr. Hovell, Dr. H. Jackson, Dr. L. Down, Mr. Chiffen, Dr. Sanders, Dr. Gilchrist, Dr. Nicolson, Dr. Grierson, Dr. Paul, Dr. Nicholson, Dr. Crichton Browne, Dr. Needham, Dr. Eastwood, Dr. Carson, Dr. S. Haynes, Dr. Clouston, Dr. Kitching, Dr. Sabben, Dr. Deas, Mr. Thompson, Mr. Aldridge.*

Visitors—*Mr. Macintyre, F.S.A. (London), Mr. Lockhart Clarke, F.R.S., Mr. Anderson (of York), Rev. — Burche (of York), Mr. North (York), Mr. Paley (York), Rev. — Bayly (York), Mr. Bayly (York), Mr. Durham, Mr. Lawson Tait (Wakefield), W. D. Husband Esq., President of the Council of the British Medical Association, Dr. Matterson (York), B. Dodsworth Esq. (York), Dr. Bud (York), Dr. Beckett, Rev. Mr. Palmer.*

The business opened by W. H. O. SANKEY, Esq., M.D., retiring President, delivering an introductory address. He said—I trust that I may claim the satisfaction of believing that the association has lost none of its usefulness or reputation during my year of office ; on the contrary, that the past year may be remembered as one in which some progress had been made. I do not, however, desire to credit myself individually with any share in this good work, but rather I attribute it to a general desire which I know exists among all our members to raise our association to its proper position. It is usual, at least in other medical societies, for the retiring president to recall to mind not only the gains but also the losses the society has sustained ; at all events in this instance I must crave your pardon (if only to record my own feelings) I mention the fact that during the past year we have sustained a great loss by death of our old friend and former treasurer, Mr. Ley. Mr. Ley was connected with our specialty the greater part of his professional life, attracted by the efforts which were making by Dr. Conolly, at Hanwell, to inaugurate and establish the non-restraint. Mr. Ley within four or five years of his qualification as medical practitioner attached himself to our specialty, early taking a great interest and active co-operation in this society, for many years filling the office of your treasurer. During my year of office I have necessarily been brought into contact with a large number of our associates ; this has thus been to me a source of great advantage and gratification, amply rewarding me for the meagre exertions imposed upon me by the office of president. I have thus become acquainted with the opinions and views of our members on many matters of our common interest. I may, I trust, in retiring, be allowed then to say that the impression that I have received from conversations with different associates is that the time is fully come when we should do well to carefully re-examine our constitution in order to eradicate any germ of decay that may be lurking in its constitution, in fact, to ask ourselves whether our usefulness is as great as it should be, and our position recognised as it ought to be, and, if not, to ascertain the cause. Several matters, and especially that of the proposed amalgamation, will afford us a good opportunity for making an earnest and searching investigation into our affairs, and I trust such an enquiry will be made with a hearty desire to render the association worthy of the associates. It would be out of place, in the presence of our very distinguished and very worthy president, to express the pleasure we all feel in placing ourselves and our affairs under his guidance for the ensuing year, confident as we all must be that while his reputation will add a lustre to our association, his counsel will be of the very highest value to our deliberations. I, therefore, have now only to commit my title and office into the hands of my distinguished successor, Professor Laycock (applause).

ADDRESS BY PROFESSOR LAYCOCK.

[*For President's address see Part I.—Original Articles.*]

Dr. TUKE said that under ordinary circumstances, as an officer of the Association, he should not have ventured to speak immediately upon the address of the President, but feeling that some remarks might be looked for from him, inasmuch as the address of the President had been somewhat personal, he rose to express that which he was sure was the opinion of the meeting—that no more animated or valuable address had been given to this society, certainly none in his (Dr. Tuke's) recollections of twenty years. With the eloquent words of the President ringing in their ears, he would not trouble the members with personal explanations, which would come better on reference to the motion to which his name and that of Dr. Robertson was appended. He would, therefore, propose very earnestly a vote of thanks to Professor Laycock for his most able and stirring address from the chair.

Dr. CHRISTIE said that having been the proposer of Professor Laycock as President, and feeling sure that under his Presidency the Association would progress in position and in usefulness, he would beg to second the proposition, which he was sure would meet with unanimous adoption (applause).

Dr. LAYCOCK—Before proceeding to further business, I have to remark that there are several gentlemen present who are candidates for election, and whose names will come on for ballot later in our proceedings. I think it would be much better that instead of being elected after our officers, they should be elected at once, and so take part in our proceedings. I, as President, arrange the business of the day, and think this the proper course. In order to settle the question, I propose that we set other business aside, and forthwith proceed to the election of the new members.

Dr. STEWART, of Dublin, seconded this proposition.

Dr. TUKE said he was most unwilling to oppose the ruling of the President. The general custom of the Society had been to invite all proposed members to join their proceedings as guests, but to give them no votes till later in the day; in point of fact, the Society was dissolved. There was no President, no Treasurer, no Council, no Secretary, and before their election, the election of new members would be premature. He would add that great inconvenience might arise. A president, or other officer, might thus bring new votes into the Society, and influence the election of officers. The election of new members thus early was also a mistake, unless there was another subsequent election. While he was speaking, the names of four new candidates had been handed to him, and more might follow.

After some general discussion, Professor LAYCOCK said that the President of the Society would have too much its interest at heart to adopt such a course as that suggested by the Hon. Sec., and that new members might be elected any time during the day. He should move the resolution. Upon a division it was declared carried, and the following gentlemen were elected members of the Association :—

NEW MEMBERS.

- Aldridge, Charles, Esq., Assistant Medical Officer, West Riding Asylum, York.
- Burman, Wilkie, M.D., Assistant Medical Officer, Devon Asylum.
- Deas, P. M., M.D., Medical Superintendent, Cheshire County Asylum.
- Dukes, M., M.D., High House, Enfield Highway.
- Daniels, W. C., M.D., Epsom.
- Etheridge, C., Esq., Buckhampstead.
- Greirson, S., M.D., Medical Superintendent, Roxburgh Asylum.
- Garner, M. S., Esq., Clonmel.
- Kriekenbeck, C. A., M.D., Government Asylum, Ceylon
- Matterson, W. A., M.D., York.
- Millar, John, M.D., 48, Albany Street, Edinburgh.
- Macconchy, John, M.B., Downpatrick.
- Milne, Thomas, M.B., New Deer, Aberdeenshire.
- Morrison, W., Esq., Assistant Medical Officer, Fife Asylum.
- Mitchell, B. S., Esq., Assistant Medical Officer, West Riding Asylum, York.
- North, S. A., Esq., York.
- Nicolson, David, M.D., Assistant Medical Officer, Her Majesty's Prisons, Portland.
- Smith, Edward, M.D., Derry District Asylum.
- Sanderson, Alexander, Esq., Bridge Street, Musselburgh.
- Thorne, Thorne, M.D., London.
- Tottenham, Edward G., London.
- Thompson, George, Esq., Assistant Medical Officer, West Riding York.
- Wood, F. O., M.R.C.S., Dunston Lodge, Gateshead-on-Tyne.
- Wishaw, John C., Esq., Lucknow.
- Winn, Dr., Harley Street, London.
- Williams, Llewelyn, M.D. Edin., M.R.C.P., 9, Leonard Place, Kensington.
- Young, Andrew, M.D., Monaghan District Asylum.

The PRESIDENT then called on Dr. Tuke to propose the resolution of which he had given notice.

Dr. HARRINGTON TUKE said—I much regret that I should have to intrude upon the association with any remarks upon the able speech of our President; but there are two questions raised by him which I think it incumbent upon me to notice. The first is that there were three notices of motion last year which do not appear upon the *Agenda*. If we had had the advantage of Dr. Laycock's presence at our annual meetings he would have known that such notices are never put upon the *Agenda*. Our rule is that notice of motion must be given either at an annual meeting, or by circular one month before. It often happens that a motion of which notice has been given at an annual meeting falls to the ground in consequence of the absence of the mover; thus to-day, of the three proposed resolutions, only one gentleman is present to bring forward his motion. I have already written to them all to explain the law bearing on the case, and therefore Dr. Laycock's ruling that they are in order is quite unnecessary, as no one could doubt the fact. I pass entirely the remark of our President upon the Hon. Secretary having "ruled" that the meeting could not discuss a President's Address. My remarks on that subject are printed in the Journal for October, 1865. The second question raised by our President is whether, as officers of this association, Dr. Robertson and I were justified in proposing a

resolution that Dr. Laycock declares to aim at the very existence of our society. Dr. Robertson is at least a most innocent agent in this extraordinary conspiracy. I know that he approved of the resolution, and therefore, without consulting him, put his name down to second the resolution, which I doubted my own ability to bring forward with sufficient power and clearness. I hope to convince the Association the resolution is worthy their gravest consideration. It should be clearly understood that the resolution is brought forward by me, simply as a member of the Association ; that I am entirely in their hands, and will withdraw it if they wish. But those who know me I feel sure will acquit me of any object but the good of the Association, and those who, unlike our learned President, have been in the habit of attending our meetings, will know that resolutions are set down upon the *Agenda* as subjects for discussion, and that the wording of them is comparatively immaterial, if only they give an opportunity to examine the merits of the case. Our President complains that the letter on the subject were not laid before the President. This was an oversight, for which I have apologised to Dr. Sankey ; but in fact this would show only that I have thought more of the Association than of its President, and have brought a question directly before them, without venturing to prejudge it by consultation with anyone. The letters which I now propose to read has been laid before the President and Council this morning, but not discussed, as being a matter so essentially requiring a general expression of opinion.

“ 48, Queen Anne Street, W.,
“ June 1st, 1869.

“ DEAR SIR,—May I request that you will place the accompanying communication before the Members of the Medico-Psychological Association at the earliest opportunity.

“ If in summoning a General Meeting of the Association it should be considered desirable to send a copy of the enclosed Resolutions to each member with the notice, you can, if you wish, make use of our type, which we have left standing, for the purpose of saving each society the expense of having it set up for themselves.

“ I remain, dear sir,
“ Faithfully yours,

“ GEO. G. GASCOYEN.”

“ Dr. Harrington Tuke,

“ Hon. Gen. Sec. to the

“ Medico-Psychological Association.”

“ Royal Medical and Chirurgical Society,
“ 53, Berners Street, Oxford Street. W.

“ To the President of the Medico-Psychological Association.

“ SIR,—I have been directed by the President of the Royal Medical and Chirurgical Society to forward to you the following resolutions which have been adopted by that Society at a Special General Meeting, and to request that you will submit them to the members of the Medico-Psychological Association for their consideration.

“ I. That steps be taken to secure the union of various societies now existing in London for the cultivation of special branches of medicine and of the allied sciences.

“ II. That the resolutions adopted provisionally by the Royal Medical and Chirurgical Society be submitted to each of the other societies mentioned in Resolution IX., as a basis of a scheme for effecting such union ; and that each society, in the event of its approving of the proposed amalgamation, be requested to nominate three members to form a general committee, which shall prepare a complete scheme to be submitted to each society for its approval.

“ I beg to enclose a copy of the Resolutions which have been agreed upon by this society as the outline of a scheme by which the union proposed may be effected.

“ I have the honour to be, sir,
“ Your obedient servant,

“ June 1st, 1869.”

“ GEO. G. GASCOYEN, Hon. Sec.

Resolutions adopted provisionally by the Royal Medical and Chirurgical Society to be submitted to the various societies mentioned in Resolution XII., as a basis of a scheme for effecting their union :—

“ I. That a new society be formed, and incorporated by Royal Charter, under the title of the Royal Society of Medicine ; and that this Society comprise sections for the main branches of medicine and the collateral sciences.

- " II. That the following sections be formed :
- " 1. Medicine and surgery.
 - " 2. Obstetrics.
 - " 3. Psychological medicine.
 - " 4. Clinical medicine and surgery.
 - " 5. Pathology and morbid anatomy.
 - " 6. State medicine—comprising epidemiology, public health, and medical jurisprudence.
 - " 7. Physiology and anatomy.
- " Each section will entertain questions of therapeutics, chemistry, and physics, so far as they bear on its special subject.
- " III. That in the formation of the new society, power shall be taken which shall enable the society to modify the existing sections, or to add new ones.
- " IV. That the general management of the Royal Society of Medicine be under the control of a general council, consisting of a president, two treasurers, two librarians, two secretaries, the presidents of the various sections, and additional members to be nominated, one by each section.
- " V. That the presidents of the several sections be *ex officio* vice-presidents of the society.
- " VI. That the president, treasurers, librarian, and secretaries of the society be nominated by the general council.
- " VII. That all the members of the general council, with the exception of the vice-presidents, who are *ex officio* members, be elected annually by the society at a general meeting.
- " VIII. That the president of the society be chosen annually from amongst the past or present presidents of sections, and be ineligible for re-election; and that the president of the society cease, on his election, to be a president of a section.
- " IX. That the treasurers, librarians, and secretaries be elected annually from the general body of the fellows; and that they be not allowed to hold other offices in the society, or in any of the sections.
- " X. That the money, books, premises, and other properties, belonging to any of the societies which shall join in the proposed amalgamation, become the property of the Royal Society of Medicine; and that the entire management of the funds of the society be in the hands of a general council.
- " XI. That there be at least three trustees, in whom the property of the society shall be vested; that they be nominated by the general council, and elected by the society at a general meeting; and that they hold their appointments during the pleasure of the society.
- " XII. That all Fellows or Members of the following Societies, viz., the Royal Medical and Chirurgical, the Pathological, the Epidemiological, the Obstetrical, the Clinical, and the Medico-Psychological Association, be original Fellows of the Royal Society of Medicine without further nomination or election, provided they make the payments hereafter to be arranged.
- " XIII. That power be taken by the Charter to incorporate additional medical societies after the proposed society shall have been formed.
- " XIV. That Fellows, Members, or Licentiates, of the Colleges of Physicians or Surgeons of Great Britain and Ireland—Doctors or Bachelors of Medicine, or Masters or Bachelors of Surgery, of the Universities of Great Britain and Ireland, or of the Colonies—Members of the Faculty of Physicians and Surgeons of Glasgow—Licentiates of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland, or foreigners whose qualifications are satisfactory to the council—be eligible for admission into the society by nomination and election, as at present is arranged in the Royal Medical and Chirurgical Society; and that their recommendation be signed by three Fellows of the Society, two of whom, at least, shall be members of a section to which the candidate declares himself desirous of becoming attached.
- " XV. That in adjusting the scale of payments, consideration be had to the number of sections which each Fellow may join, and to the privilege of using the library of the society and of receiving copies of the transactions and proceedings of the several sections.
- " XVI. That deductions from future payments to the society be allowed for any admission or composition fees which may have been already paid to any of the societies enumerated in Resolution XII., as provided in the Bye-Laws of those societies.

"XVII. That any Fellow, who shall wish to leave one section of the society and join another, may do so on the day of the annual meeting of the society.

"XVIII. That any registered medical practitioner, on complying with the regulations required, be eligible for election as an Associate of the Royal Society of Medicine on payment of an admission fee of One Guinea and an annual contribution of One Guinea, which shall entitle him to attend the meetings of any one of the sections, and also to a copy of the Transactions and Proceedings of such section; and that the manner of election of such Associates be regulated by each section as it may think fit.

"XIX. That no present Fellow or Member of any of the societies enumerated in Clause XII. be required to pay the admission fee of One Guinea on becoming an Associate of the Society: and that all privileges now enjoyed by the present members of those societies be, as far as possible, preserved to the members of future sections.

"XX. That the members of each separate section elect annually the council of that section; and that such council consist of a president, two secretaries, and such number of other councillors as shall hereafter be arranged. The president of each section and the representative member of the section to the general council must be Fellows of Society.

"XXI. That the council of each section have the entire control of the internal business of their own section, subject to such general arrangements as shall be made by the general council of the society; and that they publish annually, or at such periods as shall hereafter be arranged, the transactions of their own section, provided the expenditure of each section, for transactions and other special purposes, do not exceed one half the income derived from the annual subscriptions of its members, or such other proportion as may hereafter be agreed upon.

"XXII. That the general council of the society may, under special circumstances, make special grants in aid of the publication of Transactions, or other expenses of any section.

"XXIII. That the proposed society comprise a grade of Honorary Fellows, consisting of the Honorary Fellows or Honorary Members of any of the enumerated societies which shall join in the amalgamation, and others to be elected for life from British subjects who have eminently distinguished themselves in medicine or surgery, or in the sciences connected therewith, but who do not practice the medical profession; and from foreigners who have eminently distinguished themselves in medicine or surgery or in the sciences connected therewith. That such Honorary Fellows be elected by the society at a general meeting, on the recommendation of the Council.

"GEORGE BURROWS,
President."

"May 27th, 1869.

It will be for the association carefully to consider the proposal thus made by the Medico-Chirurgical Society. I confess myself, in spite of the vaticinations of our President, most convinced that our junction with this proposed Royal Society of Medicine will be most advantageous to us; I would not merge our individuality in the Medico-Chirurgical or any other society. In the proposed plan we are not required to do so, we retain our officers, our organization, and our Journal, and I think the opportunity thus held out to us of identifying our Society with the others engaged in the study of Medical Science, is one that we should eagerly embrace. There is an absurd distinction made by the general public between our specialty and other departments of medicine, this our amalgamation with the Royal Society of Medicine would go far to break down. How absurd it is, those only who know the medical acquirements necessary to properly carry out the duties of an asylum superintendent, can sufficiently appreciate; in no branch of medicine is sound, practical and comprehensive knowledge more urgently necessary, and in no position is combined medical and surgical ability more required, or more often found. The offer to enrol us in a high place in the society, is a just and graceful recognition of this truth, and an offer which it becomes us carefully to consider before we adopt our President's depreciatory opinion of its value. Another great advantage will be the securing of for ourselves a distinct habitation for our meetings, for our records and, I hope, for a future library. All this the liberality of the Medico-Chirurgical Society offers to us, our present subscriptions will give those who are not already members of that society nearly all the advantages we, its present members, possess, and I sincerely trust that this meeting will express its approval of the plan pro-

posed, remembering always, that the Medical-Chirurgical must have help and encouragement from us and other societies, before it can hope to carry through their arduous endeavour, to obtain a new charter, and to form a Royal Society of Medicine.

Dr. LOCKHART ROBERTSON briefly seconded this resolution.

Dr. CHRISTIE moved as an amendment on Dr. Tuke's motion, that a committee be appointed for the following purposes :—

- 1.—To consider any proposals which may be made for the amalgamation of this Association with other Medical Associations, and to report, either at next annual meeting, or at a meeting specially called, according as the Committee may deem best.
- 2.—To consider and report whether any and what changes in the organization of the Association are desirable.
- 3.—To consider and report whether any and what changes in the mode of conducting the Journal are desirable.

That the Committee consist of the present and former Presidents of the Association, with power to add three ordinary members to their number. That the members of this Committee may vote by proxy, and may carry on the business by correspondence.

Dr. ARLIDGE suggested that some younger members should be placed upon the Committee, as some former Presidents were precluded from taking an active part in the business of the Association.

Dr. CHRISTIE saw no objection to adding three names to the Committee, and ultimately the names of Drs. Arlidge, Christie, and Crichton Browne were added.

Dr. CRICHTON BROWNE said that he must admit that he had come down to the meeting, much predisposed to object to any plan of amalgamation with another Society. The Association had been the growth of years, was each year increasing in position and influence, and had, he thought, everything to lose and nothing to gain by an amalgamation. The explanation, however, of Dr. Tuke and Dr. Robertson had shown him that the project was worthy of examination; still more information was, however, necessary; and he should certainly support the amendment, confidently leaving the future of the Association to the decision of the special meeting, aided as it would be in its judgment by so able a committee.

The PRESIDENT put the amendment to the meeting, which was carried unanimously.

The PRESIDENT said the next business was the choice of a place of meeting for next year; he believed that Dublin had been suggested.

Dr. CHRISTIE proposed, and Dr. DAVEY seconded, a resolution that London should be the next place of meeting.

Dr. HARRINGTON TUKE said that he had received a letter from Dr. Duncan, requesting that his name should be taken from the Council list, as he found that there was no prospect of a meeting being arranged next year in Dublin, in consequence of the building alterations in progress at the Richmond Asylum. Dr. Tuke read the following letter from Dr. Lalor :—

“ Richmond District Lunatic Asylum,
“ Dublin, 2nd day of June, 1869.

“ DEAR DR. ROBERTSON,

“ I think it well to write to you on the subject of the next meeting of the Association in Dublin before you and other of the leading members have taken a decided opinion, or any action in the matter. Nothing, I can assure you, would give me more pleasure than to see the Society meet in Dublin as soon and as often as possible; but it appears obvious that a meeting is not desirable here, or elsewhere, when the principal Institution connected with our specialty is not in a normal condition. I think there cannot be a doubt that this will be the case in Dublin in the summer of 1870, as the extensive alterations in progress here, involving the large outlay of £30,000, cannot possibly be near completion at that time, and consequently the Institution will be to a considerable extent in a state of disorganization. I would wish (I cannot well say how much) that the Association at its next visit to Dublin should have a favourable opportunity of judging of our School system, and I think it probable the large male school-rooms to be built here will not have been completed and in good working order before the summer of 1872. At that time I hope we will be in full time here, but not before, and I submit it for

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Treasurer's Annual Balance Sheet, July, 1869.

RECEIPTS.	EXPENDITURE.		
To Balance Cash in Hand 1867-8	£	s.	d.
...	...	...	25 17 5
To Subscriptions received	...	...	130 4 0
By Secretary for Ireland...	...	...	24 3 0
By Secretary for Scotland	...	...	35 14 0
By Sale of Journal, Messrs. Churchill	...	...	46 0 0
Annual and Quarterly Meetings	...	...	...
Editorial Expenses	...	...	...
Printing, advertising and publishing Journal	...	...	...
Sundries—			
Treasurer	...	...	...
Secretary for Ireland	...	...	...
Secretary for Scotland	...	...	...
General Secretary...	...	...	...
Balance in Treasurer's hands	...	...	...
	£	s.	d.
	261	18	5
	14	13	0
	4	10	0
	192	15	3
	2	1	6
	12	8	
	6	0	
	5	5	0
	41	15	0
	£	261	18

Examined and compared with the vouchers and found correct.

LANGDON DOWN, Auditor

J. H. PAUL, Treasurer
(Signed)

your consideration that you should make no arrangements at the next meeting which might indicate an earlier meeting here. At the same time an opening might be left so that the meeting might be held here in 1871, if contrary to my expectation our Institution should then be in such order as would be desirable for the occasion.

"Yours very sincerely,
"JOSEPH LALOR."

The place of meeting was decided to be London.

ELECTION OF OFFICERS.

PRESIDENT ELECT.—Dr. Robert Boyd, M.D. Edin., F.R.C.P., late Medical Superintendent of the Somerset County Asylum, was by ballot elected President for 1870.

Dr. Paul was re-elected *Treasurer*.

Dr. Lockhart Robertson, and Dr. Maudsley were re-elected *Editors of the Journal*.

Dr. Hughlings Jackson, and Dr. Langdon Down were appointed *Auditors*.

Dr. Tuke was re-elected *Honorary General Secretary*.

Dr. Stewart was elected *Secretary for Ireland*, and upon the resignation of Dr. RORIE, Dr. J. B. Tuke *Secretary for Scotland*.

ELECTION OF COUNCIL.

The PRESIDENT said that Dr. Arlide had a motion to propose which, if carried, would materially affect the member and personnel of the Council.

Dr. ARLIDGE moved and Dr. DAVEY seconded the following resolution :—"That the officers of the Association, with the President elect, the President of the past year, and twelve other members, do constitute the Council of the Association. That twelve ordinary members shall be appointed by the annual meeting, three of such members retiring by rotation, each year in the order of rotation, and be not eligible for re-election."

The motion was carried unanimously, and the following gentlemen were nominated as additional members of the Council for the year :—Dr. Stocker, Dr. Arlide, Dr. Christie, Dr. Palmer, Dr. Crichton Browne, Dr. Howden, and Dr. Wood.

The report of the Treasurer was then read, and special notice was then taken of the fact that the editorial expenses of the Journal for the last year had been only £4. (For Balance Sheet see next page.)

The meeting then adjourned. The majority of the members, after partaking of luncheon in one of the adjoining rooms, paid a visit to the Cathedral, where, by the kindness of the Dean and Chapter, the Crypt was illuminated, and the party conducted through it by the Rev. Canon Hey. The Museum and grounds of the Yorkshire Philosophical Society were also thrown open to the members of the association; and they were likewise invited to inspect York Castle.

THE AFTERNOON MEETING.

The President took the chair at two o'clock. The first business, he said, was the election of Honorary Members. He had been informed by the Secretary that notice should be given of the proposal of hon. members, and some of those he was about to propose had only been recently nominated; he should suggest that the standing orders should be suspended, and these gentlemen elected.

Dr. STEWART moved, and Dr. ARLIDGE seconded the suspension of the "Standing Orders," and the following gentlemen were declared to be elected Honorary Members :—B. W. Richardson, Esq., M.D., F.R.S.; Lockhart Clarke, Esq., M.D.; F.R.S.; T. B. Wood, Esq., chairman of the committee of the North Riding Asylum; Egerton Vernon Harcourt, Esq., one of the committee of the North Riding Asylum; Sir James Clarke, Bart., M.D., physician to the Queen; W. A. Guy, M.B., Professor of Medical Jurisprudence, King's College, London.

A letter from Dr. FLYNN was referred to the Committee already appointed.

The following report was read by the Secretary :—

Report of the Committee on the state of the Law in relation to Criminal Lunacy.

"Your Committee beg to report that they held numerous meetings in London, and, after due consideration, a memorial to the Home Secretary was drawn up, a copy of which has appeared in the Journal. The President placed himself in communication with the Right Hon. M. Bruce, but unfortunately, from the pressure of

business, he was unable to receive the members, and your Committee consequently adjourned till this day.

"Your Committee would now earnestly recommend that they be re-appointed, and that they be authorised to present the memorial on behalf of the Association, more especially as notice has been given in Parliament of a Bill relating to the subject of the Law as bearing on the Criminal Insane. And your Committee trust that the Government may be led to grant the enquiry suggested by your Association.

"The Committee cannot conclude without expressing their thanks to Professor Guy for the valuable help afforded, and they request that his name may now be officially placed with theirs; and also that he be elected as Honorary Member.

(Signed) "W. H. O. SANKEY
"President."

The SECRETARY'S report on the Quarterly Meetings was taken as read. The PRESIDENT ruled that letters of condolence were not usual, and were unnecessary.

The CHAIRMAN then made some observations on the position and prospects of medical science, stating that it was to him a matter of interest and personal feeling that he occupied so distinguished a position on this occasion in a city which in his case was associated with many useful reminiscences. It was in this city that he commenced the practice of medicine, and one of his earliest pursuits was at the County Hospital which had long been swept away to make room for the more commodious building. At that time mesmerism was being discussed, and in looking at the history of that particular doctrine, he thought that although it was surrounded by many difficulties and imperfections fundamentally, he felt it would carry with it an explanation of many of the difficulties they encountered. This was the great question they had to discuss very often—how far did the corporeal condition of a man or woman influence their moral will, and how far they were responsible, he would not say, to their Creator, but to society, on account of this morbid condition. He saw clearly that science was advancing in such a way, with such definite and firm steps, that before many years were over they would be able to place this subject on a very definite scientific footing. At the time he was engaged in his researches on the morbid condition of the brain, he saw the necessity of bringing forward this question, for particular manifestations of the brain occurred according to the laws of change in the brain itself. By constantly going from one step to another, first tracing the order of events, they at last came to some physical forces, such as galvanism, electricity, and magnetism; and he thought they might be applied practically to alter the condition of the brain in many cases of mental disease, and applied in cases which were now entirely hopeless. These were merely experimental researches in the first instance, and he hoped they would be attended with beneficial results. The chairman next referred to the strong mental changes which might be produced by various drugs. A very small dose of opium, for instance, produced a change on the mental manifestation, but those outside the profession could not comprehend how the atom of a grain could influence the whole manifestation of the man, but that was a problem to be solved by medical research. It was found that very small changes in the composition of drugs would produce diametrically opposite results, and they were now on the track of a discovery of means by which to come to a definite knowledge of the physical action on the brain by their composition. When he was a student in this city such a thing did not enter into the minds of the most advanced philosopher or physician. The idea was not possible on account of the defective state of physical and philosophical science. The position was now greatly advanced, and if they advanced as much in the next thirty years as they had advanced in the past thirty, they should have discoveries which would probably place medical science on an entirely different footing.

Dr. CRICTON BROWNE proposed a vote of thanks to Dr. Laycock for his address, which was full of the most important suggestions. He stated that galvanism had been in use at the Warwick Asylum, and he had been using it in the West Riding Asylum. Their homeopathic friends need not derive any consolation from the reference which had been made to small doses. He (the Chairman) had referred to small doses in a very different way, and the homœopathists might go to their asylums to curse their pharmacopeia but they would stay to bless it. It was a gratification to him to see his eminent teacher, Professor Laycock, and he heartily rejoiced that he had been induced to come and listen to him. Much of the success that had attended him (Dr. Browne) he attributed to Dr. Laycock's teaching. The further he

advanced in life the more he respected and esteemed him, and attached the greater importance to those comprehensive and noble lessons he had taught, and was teaching in the University of Edinburgh.

Dr. DOWN seconded the vote of thanks, which was carried amidst applause. Professor LAYCOCK returned thanks and called upon Dr. Richardson to read his paper on "Excessive Mental Strain."—See Part I.—Original Articles.

Professor LAYCOCK said he had listened with the utmost interest and great pleasure to the paper of his friend Dr. Richardson. It was not only elegant in words but impressive in facts. With what he had said his (Dr. Laycock's) experience very largely coincided, and he could add many facts as to the relation of mental work to physical degeneration. It was a very striking fact that hereditary diseases put an end to intellectual power, so much so that scarcely any of our great men had left descendants behind. This was a very lamentable fact, because seeing that degeneration was hereditary, it would appear that that perfection which they found resulted from the due use of mental power might be made hereditary too. He concluded by proposing a vote of thanks to Dr. Richardson for his very valuable paper.

Mr. HOVELL had much pleasure in seconding a vote of thanks to Dr. Richardson for his interesting and eloquent paper. He quite agree in the effect produced, but he felt bound to object in *limine* that the causes brought forward did not affect the brain exclusively, or indeed, principally. It was perfectly true that excessive mental strain would cause physical degeneration of the brain, but it was very rare to meet with pure mental effort unaccompanied by emotional influences. The case of the late Sir Walter Scott would illustrate this, although it was an undoubted fact that his valuable life was shortened, and his intellect clouded by over-work. No one would venture to deny that the adverse emotional influence of anxiety respecting his pecuniary affairs had a larger share than his mental work in producing the lamentable result. In this sense many of the cases brought forward by Dr. Richardson had a double character, and the view which limited the effects to the brain met the state of the case only partially, although it was quite in accordance with the anomaly of the Medico-Psychological Association, publishing the results of its labours and investigations in the Journal of *Mental Science*. Man possessed not only body and mind, but feeling also. The physical, mental, and moral qualities of man had each their analogue in a nerve-centre. The medulla and brain represented the physical and mental, and the sympathetic might be presumed to represent the moral. The vaso-motor nerves presided over the heart and circulation, and the palpitation alluded to by Dr. Richardson was a prominent symptom in some cases. We might therefore infer that the controlling power of the vaso-motor system over the action of the heart was weakened by depressing emotions. The power of the brain would be affected also, but secondarily, and not primarily. It was true that the impression of any emotion must needs be conveyed to the brain by the nerves of special sense, but the appreciation of an emotion by the perceptive faculties should not be confused with the portion or division of the nervous system on which the effect of that impression fell. Fifty years ago, a surgeon had the hardihood to assert that the mind was as much a function of the brain as the secretion of bile was of the liver, and depended as much upon integrity of structure of the secreting organ. But many present would go further, and Mr. Hovell among the number, and maintain that the passions and emotions were equally attended by normal and abnormal molecular change, according as such emotions were favourable or adverse. We thus stood upon the ground that not only the physical and mental qualities of man were material, but so also were the emotional. The mental power directed the physical, and the moral was equally powerful in regulating the mental; and even more so. The psychical nature of man was physical, mental, and moral; these qualities were all material. But there was yet a higher principle or spirit, which was immaterial. The emotion might excite or depress, soothe or disturb; but it was only through man's higher principles and immaterial or spiritual condition that his whole nature could be elevated.

Dr. SKAEE pointed out several intermediate agencies between over mental work and insanity, such as want of sleep, anxiety, domestic trouble, commercial losses, &c. In consequence of these there was a waste of tissue, and thus in many cases was the dire result which ensued from excessive mental strain caused.

Dr. MATTERTON, of York, agreed very much with some of the remarks of Mr. Hovell with reference to emotions. He spoke of the evils of sleeplessness and the beneficial application of certain remedies which he suggested.

Dr. DAVEY spoke of the injurious and even fatal effects of acute emotions and intense fright. Such effects, he said, we must regard as, in the first place, *cerebral*. There was no fact more easily demonstrated than that one which located the several primitive emotions or affections of man and the higher animals in certain portions of brain-matter. Take then any one of the many mental faculties—take for example the simple and undecomposable feeling of “caution” or “conscientiousness” or “hope.” Now, the first, or primary consequence of any sudden shock to any one or more of such primitive emotions, *i.e.*, to a given portion of brain-tissue—would be the excitation or development of an acute and exhausting reflex-action—involving not only the mind, so to put it, but the several ganglia of the sympathetic nervous system—including more especially its great central organ—the *Solar-Plexus*. In this case we must see that the main-spring of life, as well as of all brain-power (*cerebration*) being thus thrown out of gear, the heart’s action is injuriously affected; and the lungs, deprived of a due share of nerve-force, are therefore no longer competent to the exercise of their normal functions. The blood too remains carbonized, and the organism—in its entirety—deprived of all oxygen, and so left without the required stimulus to action, flags; and thus is it, that in extreme cases of emotion or fright death results. Whilst admitting the very valuable observations of Dr. Richardson in regard to “brain-work,” he, Dr. Davey, regretted the omission by the author of all notice of the labours and successes of Drs. Gall and Spurzheim. He felt confident that Phrenology was the only science of mind; it alone reached the difficulties of our especial branch of practice. The varieties of *brain-force* in man, the many extremes in character, the diversities of mind or feeling among us, were to be explained only by the teachings of the great men just named (No, no, and laughter). The quantity and not less the quality of brain in individuals were points deserving the very highest consideration in questions such as those brought to our attention this day. The reference made to dramatic matters is of much interest. The wear and tear of the actor’s career, and the risk incurred both to health and life by excessive mental strain, and not less by the great physical power needed at certain times, were well illustrated in both the career and decline of the first Kean, who may be said to have died in the impersonation of one of Shakespear’s grandest characters, *viz.*, Othello.

Dr. DOWN said he commenced his professional life as a believer in phrenology. He therefore differed with the remarks which had been made on that subject. Ten years’ practice made him a pervert of that system, and after mature consideration he had come to the conclusion that phrenology did not assist at all in ascertaining the causes of lunacy. They could estimate the quantity of the brain, but owing to not being able to ascertain the quality was the failure of phrenology, which had received due attention from those who paid great attention to psychological subjects, and had been tried and found wanting. (Applause).

Dr. RICHARDSON briefly replied to the criticisms on his paper, after which

Dr. LOCKHART CLARKE, F.R.S., read a paper on a “Case of General Paresis,” and exhibited microscopical preparations of the brain and spinal cord. Both the paper and the exhibition appeared to afford considerable interest to the association.

Dr. Lockhart Clarke’s Paper will appear in the Journal of Mental Science for January, 1870.

In the absence of the author, Dr. Daniel Hack Tuke, his paper *An Apology for Lord Brougham on Psychological grounds*, was taken as read. It will be found in Part I., Original Articles of this number of the *Journal of Mental Science*.

Dr. SABBEN, of Stoke Newington, read a paper on “The Relation of Ritualism to Insanity.” He expressed the opinion that this was a subject of the utmost importance to all engaged in their special branch of medicine. The daily-spreading influence of Ritualism and its injurious effects on society call forth some observations which he felt sure they would not consider out of place in this meeting. Ritualism, at the present time, was evidently one of the most prominent causes of insanity in the middle ranks of life. Within the last two years he had had under his care several cases of mental derangement caused by it, and had selected those of the most importance, which he proceeded to bring under the notice of the association. From these cases he came to the following conclusions:—1st, that Ritualism appears so entirely to engross the attention of the individual that there is little or no desire to dwell upon matters beyond the bounds of its own bearing—the train of thought is naturally unaltered, laying the first stone towards disease. 2nd, the length and manner of conducting the services, and the time spent in public and private prayer (occupying in some cases nearly the whole day), combined with the

most rigid rules for fasting, can scarcely fail to destroy the strongest constitution, both physically and mentally. 3rd, that it is the younger members of society, their intellect being the most sensitive to impressions, who become its victims. 4th, where there is an hereditary tendency to insanity, or where mental deficiency exists, the individual is sure to fall a prey. And, in conclusion, he asked whether it was not possible for some steps to be taken to prevent the increasing evil of Ritualism, and to save others from its sad consequences, for, in this country, when any contagious disease which is likely to destroy life makes its appearance, hundreds of different opinions are given by an excited multitude as to the best course to be pursued to prevent its raging further. Now, if such care and caution be taken to keep away the causes of bodily disease, how much more strongly did it devolve upon them to exert every power to check a malady which is more destructive—spreading itself far and wide over our country—taking possession of our houses of religion—ravaging our position in the State, and bringing misery and desolation into our homes.

Dr. DAVEY said that Ritualism must be looked on as a very serious condition of things in the history of this country. No doubt the persons in whom there was a strong predisposing cause of insanity were the most likely to suffer from such an exaggerated and abnormal religious sentiment as that concerned in the form of faith named. The Ritualists may, in point of fact, be said to be those in whom exists a certain and well defined exaltation of action or power in certain of the emotions; and, more especially, in that one known as "veneration." A question of the first importance has been suggested by Dr. Madden, viz., How is this "Ritualism" to be corrected? The reply, as such, said Dr. Davey, is to my mind, easy. If such men as Dr. Colenso could be multiplied among us, and their good teachings diffused through the length and breadth of the Empire, then would religion take the place of mere superstition; and the religious sentiment itself be intellectualized—that is to say, infused with so large a proportion of common sense or reason that the decline in the present large number of Ritualists may, at the least, be looked for in the not far off future. So also, it appears to me, will the potent causes of lunacy be then diminished.

Dr. SANKEY remarked that religious melancholy had been treated by every writer upon Insanity, including the most ancient. Plutarch described cases of melancholy connected with religious fears and apprehensions, Old Burton in his "Anatomy of Melancholy" prided himself upon being first to separate such cases and upon giving them the title of *melancholia religiosa*; such cases as were related by the author of the paper are much older than Ritualism. The fact was that any prevalent doctrine was always represented among the religious melancholics in Asylums; for many years there was a patient at Hanwell, who was one that spoke in the unknown tongue when that particular religious novelty was in vogue. But his chief reason in rising was to say that since there were many non-professional persons present he hoped that it would not go forth as the opinion of the association that Ritualism had a peculiar relation to Insanity.

Dr. ARLIDGE observed that they had had such cases of the old system of asceticism in all ages and in every creed. In this country, and in America in particular, they had insanity produced by revivalism, which had the same effects. They had not only the mental emotions so ever-exercised as they were, but physical causes in over-working the physical system, and not taking sufficient food. The cure of the cause of this species of insanity must be left to common sense. He proposed a vote of thanks to Dr. Sabben.

Dr. CHRISTIE, in seconding the motion, remarked that Ritualism might be an exciting cause, but certainly not a predisposing cause of insanity. He thought that Dr. Sabben had utterly failed to show that the attendance of the patients at church was the cause of the disease at all. He was therefore inclined to think that Dr. Sabben was somewhat mistaken in being of opinion that Ritualism was the cause of the disease.

Dr. NICHOLSON was inclined to take a similar view as Dr. Christie. He thought some connection ought to be shown between the two before they were at liberty to come to the conclusion that insanity was produced in an individual simply from his being a Ritualist.

Dr. SANKEY, of Cheltenham, remarked that a particular individual had expressed the fear that Atlas should let down the globe, and thus destroy the world, and he did not think that was connected with Ritualism. He wished to guard against its being supposed it had been proved that Ritualism had such special causation on this subject.

Dr. TUKE thought the object of the writer of the paper was rather to guard the public, and the young especially, against long fasting, and those other exerciss which it was thought were likely to lead to insanity.

Dr. BROWNE should not like it to go abroad that they looked upon Ritualism as either a form or symptom of insanity. The cases related did not amount to a demonstration, and he thought no proof whatever had been adduced to show that the cases quoted were due to Ritualism. He begged to protest against that statement going forth as the opinion of the association.

Dr. CLOUSTON stated that he had heard that in Argyleshire the proportion of insane persons was larger than in any other county in Scotland, although there Presbyterianism was predominant.

Dr. SABBEN remarked he should have liked to have asked Dr. Browne the result of his very large practice, and then briefly referred to the points contained in his paper.

The CHAIRMAN next made a few remarks, and cautioned those who were predisposed to insanity to avoid being drawn into those strong religious exercises, as they would be certain to incur great danger, and might become, by the excessive emotional strain, demented for life.

Dr. CHRISTIE then proposed a vote of thanks to the Chairman, which was seconded by Dr. SANKEY, and carried by acclamation, after which the meeting separated.

THE DINNER

took place between six and seven o'clock in the evening, at Mr. Holiday's, the Royal Station Hotel. It was a very sumptuous entertainment, and served in strict accordance with the well-known reputation of this hotel. The party numbered upwards of seventy gentlemen, and they were presided over by Professor LAYCOCK, Edinburgh, the duties of the vice-chair devolving upon Dr. TUKE, of London. The members of the Ebor Quartett, Messrs. Lewis, Sutcliff, Humphreys, and Halliwell were present, and after dinner they sang "Non nobis Domine." Amongst the company present were the Lord Mayor, the Rev. Canon Residentiary Hey, W. D. Husband, Esq., Dr. Needham, Dr. Christie, B. W. Richardson, Esq., M.D., F.R.S., Dr. Langdon Down, Dr. Paul, Dr. Davey, Dr. Sibbald, Dr. Sabben, Dr. Nicholson, Dr. Sankey, Dr. Skae (Edinburgh), Dr. Lockhart Clarke, Dr. Lockhart Robertson, Dr. Browne (Wakefield), Dr. Hughlings Jackson, &c.

The CHAIRMAN, in giving the health of the Queen, said that her Majesty had reigned happily over her people for a long series of years, and he trusted that she would continue long to be the Sovereign of these realms. (Applause).

The CHAIRMAN next proposed the healths of their Royal Highnesses the Prince and Princess of Wales and the rest of the Royal Family. (Applause).

The CHAIRMAN said that he had much pleasure in giving the next toast, the Army, Navy, and Reserved Forces. (Applause). They knew from history the gallant deeds that the army and navy had done, and although the members of the medical profession were peaceful men, yet they felt the greatest admiration for these forces, who always served their country most satisfactorily. (Applause). There was no gentleman present connected with either the army or the navy, but he saw near him a gentleman who belonged to the reserved forces, one who occupied a distinguished position as a medical man. He alluded to Surgeon Husband, of the York Rifle Volunteers, who had long been an eminent surgeon in this city. (Applause).

Surgeon HUSBAND returned thanks for the Volunteers. He said that he met them on that evening under far different circumstances than he should have done ten years ago. At that time, when the volunteer movement commenced, those who took part in its organisation were looked upon as little better than madmen. Happily that opinion had passed away, and all who were volunteers were recognised as sane men having the welfare and security of their country at heart, and England was now safe from the attacks of any foreign foe. (Applause). On the part of the volunteers, he had to return his thanks for the kind manner in which the company had acknowledged their services. (Applause).

The CHAIRMAN said that it was not only their duty to drink the healths of the Army, Navy, and Volunteers, but it was also incumbent upon them to drink to the Church Militant upon earth. (Applause). For his own part he must say that he proposed the toast of the Church in the very largest acceptation of the terms - the Universal Church. (Applause). He gave the Church in this broad sense, without any reference to those petty divisions which were to be lamented, and with the toast he associated the name of his good friend Canon Hey. (Applause).

The Rev. Canon HEY said that when he saw the toast of the Church set down upon the paper and knew that he should have to respond to it he felt a little degree of nervousness in the presence of gentlemen eminent in their profession, and who might differ in their views upon Church questions. From what Dr. Laycock had said, however, that feeling of nervousness had passed away, and he could say that it gave him great pleasure in meeting, as he did on that occasion, gentlemen belonging to a profession which came close to the work of the minister of religion. (Hear). He felt it was necessary that the clergyman in his ministrations should have some knowledge of the physical condition of the persons with whom he has to deal, and it was also important that the medical man should possess some idea of the spiritual and mental condition of his patients. In his opinion the line of demarcation between the two was almost invisible. (Applause). He felt a considerable degree of pleasure in knowing that some of the members of the Medico-Psychological Association were old pupils of his at St. Peter's School, and it was especially to him a pleasure to see them rise in their profession. (Applause). This was one of the rewards secured by him and others in being engaged in the arduous employment associated with the management of a public school. That day it had been a source of pleasure to him to escort around the Cathedral several members of the society, but he regretted that there was not time sufficient to allow them to see all the treasures of the building. If the society should again visit this city he hoped that they would pay another visit to the Cathedral, when they would see objects of interest which they had not on this occasion witnessed. He thanked them most sincerely for the manner in which they had received the toast. (Applause).

The CHAIRMAN said that the toast next on the list was that of the Medico-Psychological Association. (Applause). He said that there was a large number of eminent medical men in the United Kingdom and in the United States belonging to this society, and that those who were promoting Medico-Psychology were not exclusively confined to those who were seated around that table. (Hear). After what had taken place in the earlier part of the day as to the aims and objects of the society he thought it would be an intrusion on his part to weary them with any further allusion to the subject. He might be allowed, however, to state that he entirely agreed with the remarks of Canon Hey as to the close relation that existed between medical science and religion, between the physician and the clergyman. Shakespeare had said, "Who can minister to the mind diseased?" but whilst the medical profession could not do that in the sense meant by the poet, yet they had alleviated a vast amount of human suffering, and if Shakespeare had been living now he would have seen what valuable services the medical profession were rendering to society at large. (Hear). He gave "Success to the Medico-Psychological Association," and he hoped that the company would drink it enthusiastically. (Applause).

The CHAIRMAN said a pleasing duty now devolved upon him, namely, that of proposing "The health of the Lord Mayor of York" (applause). He looked back with satisfaction to the time when his lordship gave his support to the promotion of sanitary measures in this city, and he well recollects the very able manner in which he had brought forward the evils attendant on intra-mural interments. He was glad to say that for very many years no interments had taken place in the grave-yards of the city, and it was to the exertions of the Lord Mayor that this great sanitary improvement had been brought about. He also had pleasure in knowing that his lordship was associated with the Press of this country (hear). The Press was a very powerful engine for good. The gentlemen who belonged to the fourth estate were most useful and valuable men in their profession, and he had great pleasure in proposing "the health of his friend Mr. Hargrove," not only as Lord Mayor, but also as a distinguished member of the national body, the Press (applause).

The LORD MAYOR said that he had to return the company his sincere thanks for the kind manner in which they had received the toast, and it was to him a pleasure to meet on that occasion so eminent a man as Professor Laycock, the President of the Association (applause). Some twenty-five years ago he remembered as the time when sanitary reform first presented itself to the public at large, and he also remembered that in the city of York attention was earnestly and ably called to the importance of drainage, ventilation, and other sanitary measures, and it was in consequence of the researches, the able papers read, and the excellent speeches delivered by Dr. Laycock on the subject, that his attention was first directed to

sanitary measures, in the furtherance of which he had ever since taken deep interest (applause). Most valuable assistance was rendered to him by Dr. Laycock, in the closing of graveyards in the city, and although an outcry was at first raised against it, he was glad to state that now and for several years past there was not a single graveyard open in York (applause). Thanks to the kindness of his fellow-citizens he had been placed in the honourable position which he occupied, and he was endeavouring to do his duty in the office which he held; and with regard to his connection with the Press of this country, he should always strive to maintain the freedom of that press (hear). The Press was the girder of public opinion, and during the last few months they had seen great changes take place in national affairs, all of which were to be ascribed to the action and the influence of the press of this country (hear). He thanked the company for the kind manner in which they had received his name (applause).

The CHAIRMAN, in complimentary terms, proposed "The healths of the Visitors" (applause).

Dr. RICHARDSON replied to the toast, considering that the position which the Society held was attributable in a great measure to Professor Laycock. The society was one which he believed would keep down medical quackery (hear). He gave "the health of the Chairman," of whose learning, high standing in his profession (of which he was a representative man), and as a writer, he spoke in eulogistic terms (hear).

The CHAIRMAN responded, feeling deeply grateful for the honour conferred upon him in being the President of the Association. He trusted that every member of the Society would agree with him in thinking that the objects they had in view were identified with matters that contributed to the welfare and happiness of mankind, and to make life more comfortable. Let them endeavour to leave something behind that the world would not willingly let die. He had to thank the Yorkshire Philosophical Society for their reception of the Association on this occasion, and in returning his warmest thanks to them, he would mention the name of Mr. Noble, the Secretary (applause).

Mr. NOBLE acknowledged the compliment. He said that it gave the Council of the Philosophical Society pleasure to receive the members of the association. The society embraced all sciences, inasmuch as they were all fairly represented in the papers which were read at the meetings from time to time, and Psychological Science was a matter of interest to some of its members.

Dr. SKAE proposed "The healths of the Editors of the Journal of Mental Science," whose labours had done much to the advancement of that science (applause.)

Dr. LOCKHART ROBERTSON returned thanks on behalf of himself and his colleague, Dr. Maudsley, who was not present. He rejoiced at the steady support which the journal had received, the contributions towards its columns having increased in number of late.

The CHAIRMAN next gave the health of Dr. Harrington Tuke, the General Secretary, whose labours in behalf of the society he spoke of in complimentary terms (applause).

Dr. TUKE, in responding, said that he had the well-being and success of the association at heart most entirely, and as Secretary, his study should always be to advance its best interests, and to increase its influence in the country.

The CHAIRMAN proposed "the health of Dr. Clarke and the other gentlemen who had favoured the meeting that day with their papers," which he must say were of an excellent character (applause).

Dr. SABBEN returned thanks, and said that he was very glad to read a paper in York, as it was his native city. He urged, with regard to the insane, that they ought to be treated upon the basis of medico-psychology (hear).

This concluded the toast list, and the company then separated.

THE CONVERSAZIONE.

In the evening a conversazione was held in the smaller Assembly Room, Blake Street, in this city, when by invitation of Dr. Christie, the members of the medical profession and the *élite* of the citizens were present to meet the members of the Psychological Association. The party comprised about two hundred ladies and gentlemen, for whose entertainment a variety of means were resorted to. Arranged on tables round the room and on stands in the centre were a multitudinous variety of optical and surgical instruments, comprising a number of microscopes, spectroscope, electrical machines and batteries, electric clock with magnetic pendulum, &c.

Numerous fossils, rare mountain plants, case of insects, specimens of photozincography, cotton in its various stages of manufacture, and foreign curiosities and works of art were also exhibited by gentlemen who were interested in the association, as well as a number of drawings and designs, some by pupils of the York School of Art, and some handsome literary work, not only as regarded their intrinsic merit, but as specimens of elaborate binding and typography. In the course of the evening Dr. Proctor, of York, gave some very pleasing experiments with Ruhmkorff's coil in an adjoining room. He first of all explained the principle on which the coil and battery were constructed. The electric spark was then produced, and a number of experiments were given to show the beautiful vari-coloured optical effects produced by passing the electric current through different gases and various other chemical preparations. At the request of Dr. Christie, Dr. Richardson, of London, also gave a demonstration of the action of his painless cutting knife, which he has lately introduced into surgical practice. The knife consists of a rapidly revolving lancet cutting blade, in fact, a cutting wheel with an extremely sharp edge. The blade revolves at the rate of twenty-five revolutions per second, and when it is placed upon the skin it cuts right through the skin without conveying any sensation or consciousness of pain. Dr. Richardson exhibited this on his own arm, making a moderately free incision. He explained that he was particularly anxious to have it understood that the instrument was at present only intended for the smaller operations in surgery, and that he was desiring only at this moment to give to every surgeon a little pocket instrument, by means of which he could perform daily, without the danger of anesthetics, many small, but extremely painful, operations on the body. During the evening Messrs. Terry supplied tea, coffee, ices, and other refreshments, which were disposed of under the superintendence of Mr. Dolby; and everything was done to make the conversazione pleasurable to all. A number of choice plants were tastefully arranged in the ante-room. The company separated shortly before midnight.

CORRESPONDENCE.

Letter from M. Brierre de Boismont.

(*Translation.*)

PARIS, July 12, 1869.

MONSIEUR ET HONORÉ CONFRÈRE,

I have just read in the July number of the *Journal of Mental Science*, page 266, a passage which has much pained me. This is the beginning and the end of it : "One finds in history that it was in the time of Napoleon I. that *Maisons de Santé* first played an important part in the government as private state prisons . . . Under the Bourbons, up to 1830, it was the turn of the Bonapartists to fill the *Maisons de Santé*; under Louis Philippe, the Republicans, and the Legitimists were more or less shut up in them, and since the establishment of the second empire it has been towards the persecution of political writers in country newspapers, or of too free-thinking students that *Maisons de Santé* have been directed."

People may write what they like, but others can also reply, and that is what I intend to do, premising that I do not ask for any redress. For a long time past prisoners in France belonging to the richer classes used to ask, as a favour, to be transferred from the prisons to the *Maisons de Santé*. Under Napoleon the 1st the government, anxious to have some guarantee for the safety of its prisoners, only granted leave of removal to those houses which were so arranged as to prevent escape; but a condition of great importance was attached to the transfer of these prisoners, not as insane, but simply as persons detained. The director signed an engagement on his personal responsibility to take every precaution to prevent the escape of the prisoners, and you will easily see to what those who signed these engagements exposed themselves. The private house of which I had the charge in 1848, had received patients in 1769, as proved by the admission of a

lunatic on Aug. 20th, 1769. This house, one of the most ancient in Paris, for Louis XIV. came to it in 1659, on his return from St. Jean de Luz, as is also proved by an inscription which freed it from the *gabelle* dues, was probably one of the first selected to receive those prisoners who were fortunate enough to be removed from their gaolers. It was, indeed, to this house (at that time there was no law to prevent such houses taking any but insane ; that law was not made till 1838) that MM. Armaud and Jules, and the Prince de Polignac, not in 1802, but on June 22nd, 1810, were transferred.

This is a literal copy of the extract from the register :—

“ By order of his Excellency, the Minister of the General Police, MM. Armaud and Jules, coming from the fortress of Vincennes, and conducted by Sieur Pagne, *officier de paix*, have been entrusted to my care till further orders from the Minister.—(Signed) Dubuisson, nephew.”

Their discharge took place on July 12th, 1812, having been ordered by the minister. These gentlemen had been eight years in the prison of Vincennes and only two years in the *Maison de Santé*, where they were treated as detained persons, and not as insane.

I will give you an instance of the risk to which the reception of these inmates exposed the proprietor of the house.

The other person referred to in the passage in the *Mental Science*, General Mallet, was placed in the house under the following order : “ M. Mallet, Claude François, Ex-General, coming from St. Pelagie (another prison), and brought by Sieur Lafitte, *officier de paix*, will be given into the charge of M. Dubuisson, nephew, director of the house, to be detained there, by order of the Councillor of State, Prefect of Police, Count of the Empire, dated the 13th January, 1810.”

Some time before his escape, on the 22nd Oct., 1812, General Mallet, having made an attempt at escape, was retaken by M. Dubuisson, and the latter informed the Prefect of Police immediately, who paid very little attention to it. When the general, for a moment the master of Paris, had been taken prisoner, a company of infantry surrounded the house and arrested M. Dubuisson. When he appeared before the Duc de Rovigo, minister of police, the latter addressed him in these terms : “ You have let the chief of the conspiracy escape, you are going to be tried with the others, and you will accompany them to the Place de Grenelle ”—(about 25 were shot). M. Dubuisson told the minister that he had given the administration warning. His report was found up and he was set at liberty, but the impression made on his mind was such that he died insane, not long after in his own establishment.

You see, then, sir and honoured *confrère*, that these detained persons were sent to our houses as prisoners, for whom the directors were held responsible, and that this responsibility might involve very disagreeable consequences. It was an obligation forced upon them, and a favour ardently sought for by the prisoners. Since the law of 1838, the *Maisons de Santé*, being confined entirely to the insane, have no longer taken political prisoners, unless they had a special quarter, which is very rare, and when the director accepts such a charge he has to sign an engagement, binding him very stringently to provide against escapes.

Such a proposition was made to me some 20 years ago, but I refused it, as only taking lunatics. The individuals included in this category succeeded, with great influence, and still only a few in number, in getting admission into *Maisons de Santé*, which did not take lunatics.

I have followed up with great care the complaints made by newspaper writers as to arbitrary detentions, but I do not know of a single decision which has gone against the director of any asylum, public or private, for this cause. The Chamber of Deputies contains energetic opponents of the powers that be, who have not hesitated to say openly before the house, that the 2nd of December was a crime, and they would not have shrunk from bringing before public opinion the detention of a man for political reasons in a *Maison de Santé*. Lastly, three months' ago, in the assembly of *Legislation comparé*, composed of magistrates and lawyers, I begged to be informed of a single conviction of an asylum physician for such a thing, and no one could give an instance.

Allow me now, sir, to remind you of the following lines, which occur in p. 301 of the same number of the Journal of Mental Science: "Galileo was morally a representative of his age, deficient in native firmness of character, as Scarpa has clearly shown, conceited but without personal dignity, he combated the malignant baseness of his enemies by subterfuge and pusillanimity . . . What was persecuted in Galileo, what was attempted to be stifled with terror, was not so much an astronomical hypothesis as the liberty of scientific investigation ; and what Galileo has especially upheld, when defending Copernicus and himself, is the right of science to develop itself in all the plenitude of its independence."

The medical man who, in all his writings, has upheld the unalienable rights of humanity and science, would rather a thousand times have closed his house than commit an act for which his conscience would reproach him.

Accept, sir, and honoured *confrère*, the assurance of my distinguished sentiments.

A. BRIERRE DE BOISMONT.

We gladly publish M. Brierre de Boismont's explanatory letter. The facts he refutes were quoted, as will be seen by reference to the "Occasional Note" in question, from a curious paper in the "Cornhill Magazine" for June. We must, however, adhere to our statement (which M. Brierre de Boismont leaves unnoticed, except by implication) that we have been informed on undoubted authority, such as M. Brierre de Boismont could not question, that the second Empire—as did the first, according to the writer in the "Cornhill"—frequently sends noisy political adversaries for temporary treatment in the Bicêtre. Difficulties have arisen, as he can easily inform himself, with the physicians of that asylum and the Minister of the Interior on this very question.

VITAL AND COSMICAL FORCE.

To the Editors of the Journal of Mental Science.

GENTLEMEN,

I noticed in your issue for July a short but clever critique of a recent paper of mine on the above subject, in which I attempt to show that there is no occult principle present in vital phenomena, but that the problem of sensation and self-motion is one entirely for natural science and rational inquiry.

Aware, as you are, that I have advocated this view for at least twenty years past, I hope that however much you may distrust my data and inferences, you will yet, for the sake of fair play and an open field to consistent scientific convictions, however unpopular, and opposed alike to the current vulgar superstitions of civilised Europe and the pedantry of savans and systems, not shrink from the responsibility of giving insertion to the following brief elucidatory remarks from my own hand in the forthcoming number of the Journal of Mental Science.

My argument is that vital action is electrical—using the term electricity as one of the modes of physical force—the correlative of light, heat, and attraction. The rationale of this hypothesis becomes quite apparent if we assume (the grounds for which are detailed further on) that oxygen gas—the element alike essential for respiration and combustion—can exist in the "capillaries," where the ultimate processes of vitality are effected, as an imponderable ether. By this assumption we get rid entirely of dualism in the seemingly double, but really single, kingdom of animate and inanimate creation.

This postulate seems self evident. If oxygen gas (fire air or vital air) be capillary force, which is merely another name for animal function, the entire phenomena of the cosmos, including sensation and voluntary motion, are seen to have for their factor the self-same universal principle, only under different conditions of activity. In other words the distinction between the personal, indivi-

dual, or subjective on the one hand, and the impersonal or objective on the other—the ego and non-ego of German ontology is an artificial, not a natural one, and all supernaturalism is resolved into the same confusion of subject and object—the mistake of a defectively analytic mind, incapable of grasping the whole truth of the question, as is the source of the delusion in the case of the astronomer in Rasselias.

To myself this central fact has appeared for more than twenty years past to supply the solution, in a natural sense, of all mysticism and transcendentalism, and completely to rehabilitate common sense and right reason, all that transcends ordinary familiar experience being merely organic derangement—centric or eccentric—of the sensorium commune. Without such a synthesis, establishing a physical basis of life on a certain and intelligibly datum, the healing art as applicable either to mind or body, one and indivisible, can never become a science, but must continue to occupy its present equivocal and empirical position, which is the same as that of natural philosophy or chemistry, anterior to the generalizations of Newton and Lavoisier.

My reason for assuming that oxygen can exist both as a gas and member of the group of correlative forces rests on the fact of having exalted the function of the vagus nerve by water, applied as in the water cure, and of having suspended the same by ammonia. My inference from these symptoms is that oxygen, necessarily reduced to a condition of infinitesimal volume and gravity to be capable of operating in infinitesimal spaces like the ultimate parenchyma of tissue, is the factor in innervation, and knowing, as we have long done, that the oxygen of the arterial blood is essential to all animal function whatever, we thus get rid entirely of any separate nerve force, and may regard all vital force as identical, its manifestations only differing according to differing histological characteristics.

All objections broached by physicists or biologists against the electrical nature of innervation, founded on the alleged comparative velocities of nerve force and electricity, or whatever else, a good *résumé* of which, under four categories, is contained in the article "Physiology," of the last edition of the *Encyclopædia Britannica*, seem removed by this unification of nerve force and all other animal force. Mind, on this hypothesis, becomes merely the "propre vie," or special function of certain portions, which it is not part of my thesis to specialize—of the encephalon, an organic process, exactly like those of other viscera.

I cannot, for the life of me, see anything but the prejudice of foregone conclusions and vain pretensions in the objections to hylozoism, from which, under the term materialism, men seem to shrink with horror. "Immaterialism"—the existence of "spirit," in any other than in its etymological and Sadducean sense—as held by theology, and inculcated at Exeter in the harangue of the present President of the British Association for the Advancement of Science, appears to me coherently unthinkable. To pretend that the material structure is not the human being himself, mind and body, seems fatal to all rational knowledge, and brands medicine, and your specialism in particular, with the stamp of indelible imposture. As far as sublimity goes, the idea that living creatures, with all their potentialities of feeling and motion, are of the same substance as the fixed stars—one with the eternal entities pervading all space and all immensity, co-extensive therefore with the "flammatia moenia mundi," seems to dwarf all the visionary, hap-hazard speculations of poetry and religion.

We must of course give up *in toto* the notion of the soul's immortality, the idea of an actual eternity of individual self-consciousness, posthumous as well as antenatal, becoming a mere nursery tale; but we have the sense of it in virtue of the identity of constitution that exists between our sentient organs and the rest of the cosmos—in every pulse beat—and surely, as Dr. Johnson says, of free will, that ought to be enough.

Time and eternity, space and immensity, are not two, but one; and the feeling of infinity, of which our brains are susceptible while organised, is just as grand as—and a great deal more comfortable—than the anticipation of its actual pos-

session. Properly speaking a perpetual sense of endlessness is equivalent practically to its real fruition.

I may add that my view of the internal constitution of water derives corroboration from the demonstrations of Faraday and Becquerel, as to the enormous amount of electricity contained in every grain of that fluid, equal to a tremendous thunder clap. I have always contended that if oxygen gas could be liquefied it would be found to be water, and this opinion has also been given by Mr. Wilde as the result of chemical experiments, detailed at great length in the Philosophical Magazine, for August, 1868.

I think, however, that the subject is one, not for chemists, but physiologists, especially for those who bring enlarged scientific views to bear upon the functions, healthy and morbid, of the brain and nervous system.

Believe me,

Sincerely yours,

R. LEWINS, M.D.

Army and Navy Club,
3rd, September, 1869.

We gladly make room for Dr. Lewins' letter, as we feel the subject on which he writes to be one of great interest and importance; but we cannot help saying that we do "distrust his data and inferences," because he has not given us sufficient details to judge of the former, and because the latter are opposed to the whole tendency of modern physics. It is true that a great deal of evidence—not noticed by Dr. Lewins—has been accumulating for some time to prove that all the various forces of matter, which we have looked upon as correlated, are merely modes of local movement, as affected by the intimate arrangement of the atoms of bodies. But this in no way weakens—it rather strengthens—our belief, that matter and force are in themselves distinct and irreducible. The desire to comprehend under one all-embracing principle has been felt by some of the greatest thinkers, and Dr. Lewins need not be ashamed of following in the footsteps of Kant. But the world is not now governed by authority, and he will find it difficult to get his opinions adopted, unless he can adduce more evidence in favour of his fundamental principles, and can connect these more closely with his inferences than he has yet done.

J. R. G.

Appointments.

J. C. COMPSON, M.D., has been appointed Assistant Medical Officer to the Leicestershire and Rutlandshire Lunatic Asylum, Leicester.

J. E. M. FINCH, M.B., has been appointed Resident Medical Superintendent of the new Leicester Borough Lunatic Asylum.

H. C. GILL, M.R.C.S.E., Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum, has been appointed Assistant Medical Officer to the North Riding Asylum, Clifton, Yorkshire.

R. GREEN, M.R.C.S., has been appointed Assistant Surgeon to the Northumberland Pauper Lunatic Asylum, Morpeth.

J. K. MACONCHY, M.B., has been appointed Visiting Medical Officer of the County Down Lunatic Asylum.

ALEXANDER REID, M.B. Aberd., has been appointed Assistant Medical Officer to the Royal Lunatic Asylum, Aberdeen.

JOSEPH HUME SMITH, M.B., has been appointed Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum.

H. G. WALKER, M.D., has been appointed Assistant Medical Officer to the Dorset County Lunatic Asylum, Dorchester.

Books, Pamphlets, &c., received for Review, 1869.(Continued from *Journal of Mental Science*, July, 1869.)

- The Laws of Vital Force in Health and Disease ; or the True Basis of Medical Science. By E. Haughton, A.B., M.D., M.R.C.S.E. Second Edition, Revised and Enlarged. London : John Churchill and Sons, New Burlington Street. Dublin : Farmin and Co., Grafton Street, 1869.
- Counsel to a Mother: being a Continuation and the Completion of "Advice to a Mother." By Pye Henry Chavasse, F.R.C.S., F.O.B. S., Lond. London : John Churchill and Sons, New Burlington Street, 1869.
- Scientific Associations : Their Rise, Progress, and Influence ; with A History of the Hunterian Society. An Oration delivered on the Fifteenth Anniversary of the above Institution, February 10th, 1869. By Henry J. Fotherby, M.D. Lond., F.G.S., Vice-President of the Hunterian Society. London : Bell and Dalby, York Street, Covent Garden, 1869.
- Die Conträre Sexualempfindung, Symptom eines Neuropathischen Psycho-pathischen Zustandes. Von Professor C. Westphal,
- Die Hirnwundungen des Menschen nach Eigenen Untersuchungen Insbesondere über die Entwicklung Derselben Beim Fötus und mit Rücksicht auf das Bedürfniss der ärzte Dargestellt. Von Alexander Ecker, Professor der Anatomie und vergleichenden Anatomie an der Universität Freiburg. Braunschweig : Druck und Verlag von Friedrich Vieweg und Sohn, 1868.
- An Inquiry into the Influence of Libidinous Excess on the Causation of Locomotor Ataxy or Tabes Dorsalis. By Thomas Laycock, M.D., Professor of the Practice of Medicine, and of Clinical Medicine, and Lecturer on Medical Psychology and Mental Diseases in the University of Edinburgh, &c., &c. Reprinted from the Dublin Quarterly Journal of Medical Science, May, 1869. Dublin : John Falconer, 53, Upper Sackville Street, Printer to Her Majesty's Stationery Office, 1869.
- Further Observations on the Treatment of Aneurism by Iodide of Potassium, with Additional Cases. By George W. Balfour, M.D., F.R.C.P.E., Physician to the Royal Infirmary, and Lecturer on the Practice of Medicine, and on Clinical Medicine. Edinburgh : Printed by Oliver and Boyd, 1869.
- On Loss of Speech, or the Power of Utterance, in respect to its Cerebral Bearings and Causes. By Robert Dunn, F.R.C.S., &c., Author of Essays on Physiological and Medical Psychology, &c. Read in the Department of Physiology at the Meeting of the British Association for the Advancement of Science, at Norwich, August, 1868. (Reprinted from the "British Medical Journal," January, 30th, 1869.) Printed by T. Richards, 37, Great Queen Street, 1869.
- The Dry Earth System. By H. J. & J. W. Girdlestone, Civil Engineers. London : E. & F. N. Spon, 48, Charing Cross, 1869.
- De la Sclérose en Plaques Disséminées par Bourneville et L. Guérard. Nouvelle Etude sur Quelques Points de la Sclérose en Plaques Disséminées par Bourneville, Avec 10 figures intercalées dans le texte et une planche en chromolithographie. Paris : Adrien Delahaye, Libraire-Éditeur Place de l'école-de-Médecine, 1869.
- On the State of the Optic Nerves and Retinæ, as Seen in the Insane. By T. Clifford Allbutt, M.A., M.D., Cantab., F.R.S., &c., Physician to the Leeds General Infirmary, &c. (From Volume LI. of the "Medico-Chirurgical Transactions," published by the Royal Medical and Chirurgical Society of London.) London : Printed by J. E. Adlard, Bartholomew Close, 1868.
- Dr. Guy on Insanity and Crime, and on the Plea of Insanity in Criminal Cases. (From the *Journal of the Statistical Society*, June, 1869.) London : Harrison and Sons, St. Martin's Lane, Printers in Ordinary to Her Majesty, 1869.

*County Asylum Reports, 1869.*1. *England.*

- General Report of the Royal Hospitals of Bridewell and Bethlehem, and of King Edward's Schools. For the year ending 31st December, 1868.
- Third Annual Report City of London Lunatic Asylum, Stone, near Dartford. 1867 and 1868.
- The Eighteenth Annual Report of the Committee of Visitors of the County Lunatic Asylum at Colney Hatch. January Quarter Sessions, 1869.
- St. Luke's Hospital for Lunatics, Established A.D., 1751. Report for the year 1868.
- Tenth Report of the Durham County Asylum. 1868.
- Sixteenth Annual Report of the Buckinghamshire County Pauper Lunatic Asylum. Presented to the Court at the Epiphany Session, 1869.
- Fourth Annual Report of Glamorgan County Lunatic Asylum, Bridgend. For the year 1868.
- Fourth Annual Report of the Committee of Visitors of the Joint Counties Asylum, Carmarthen. 1868.
- The Twentieth Annual Report of the North Wales Counties Lunatic Asylum, Denbigh. For the year 1868.
- Report of the County Lunatic Asylum at Prestwick. Presented to the Court of Adjourned Annual Session 31st December, 1868, with the Accounts of the Receipts and Payments of the Treasurer of the said Asylum.
- The Eleventh Annual Report of the Committee of Visitors of the Cambridgeshire, Isle of Ely, and Borough of Cambridge Pauper Lunatic Asylum. For the year ending the 31st day of December, 1868, with Appendices.
- Twenty-fourth Annual Report of the Medical Superintendent of the Lunatic Asylum for the Counties of Salop and Montgomery, and for the Borough of Wenlock. 1868.
- Kent County Lunatic Asylum, Barming Heath, Maidstone. Thirty-sixth year. Twenty-second Annual Report for 1868. Presented to the Committee of Visitors, January 22nd, 1869, and to the Court of General Sessions, April 13th, 1869.
- Annual Report of the Committee of Visitors of the County of Warwick Pauper Lunatic Asylum. For the year 1868.
- Fourth Annual Report of the Staffordshire Asylum, situate at Burntwood, near Lichfield. For the year ending December, 1868.
- Littlemoor Asylum—Superintendent's Report for 1868, with Statistical Tables.
- Report of the Committee of Visitors of the Lunatic Asylum for the Counties of Bedford, Hertford, and Huntingdon, called the "Three Counties Asylum." For the year ending the 31st day of December, 1868, with Appendices.
- Sussex County Lunatic Asylum, Haywards Heath. Tenth Annual Reports for 1868.
- The Report of the Committee of Visitors, Superintendent, and Chaplain of the Cheshire Lunatic Asylum, together with the Annual Statement of Account. Made to the Court of General Quarter Sessions of the Peace, holden at Nether Knutsford, in and for the County of Chester, on Monday, April 12th, 1869.
- Leicestershire and Rutland Lunatic Asylum. The Twentieth Annual Report of the United Committee of Visitors, being the Report for the year 1868.
- Report of the County Lunatic Asylum at Rainhill. Presented to the Court of Adjourned Annual Session, 31st December, 1868, with the Accounts of the Receipts and Payments of the Treasurer of the said Asylum.
- Hants County Lunatic Asylum Report. 1869.
- Fifteenth Annual Report of the County and City of Worcester Pauper Lunatic Asylum.

- Cumberland and Westmorland Lunatic Asylum. Annual Report for the year 1868.
- Eighteenth Annual Report of the Wilts County Asylum, Devizes. For the year 1868.
- Essex Lunatic Asylum Reports and other Documents. Printed by order of the January Quarter Session, 1869.
- Newcastle-upon-Tyne Borough Lunatic Asylum. Fourth Annual Report, 1868.
- Report of the Medical Superintendent, with the Accounts of the Treasurer of the Norfolk Lunatic Asylum. For the year 1868.
- Dorset County Lunatic Asylums Annual Report. 1868.
- Forty-second Annual Report of the Committee of Management of the Warneford Asylum, Headington Hill, near Oxford. For the year ending December 31st, 1868.
- Twenty-third Annual Report of the Devon Lunatic Asylum. 1869.
- The Eighteenth Annual Report of the Committee of Visitors of the Lunatic Asylum for the Borough of Birmingham. 1868.
- The Sixteenth Annual Report of the Committee of Visitors of the Joint Lunatic Asylum at Abergavenny for the Counties of Monmouth, Hereford, Brecon, Radnor, and City of Hereford. For the year 1868.
- York Lunatic Asylum—Annual Report. 1869.
- Report of the Committee of Visitors of the Surrey Lunatic Asylum, Wandsworth. For the year 1868.
- Second Annual Report of the Committee of Visitors of the Surrey County Lunatic Asylum at Brookwood. To be presented to the Court of Quarter Session held at Reigate on the 6th day of April, 1869.
- The Seventy-second Report of the Friends' Retreat, near York. 1868.
- The Asylum for Idiots, instituted October 27th, 1847. Incorporated by Royal Charter, 1862. Report, 1869.
- The Thirteenth Annual Report of the State of the United Lunatic Asylum for the County and Borough of Nottingham, and the Fifty-eighth of the Original Institution, formerly the General Lunatic Asylum. 1868.
- Report of the Committee of Visitors of the Lunatic Asylum for the North Riding of Yorkshire. Presented at the Epiphany Quarter Sessions for the Riding (1869); together with the Superintendent's Twenty-second Annual Report. Presented at the Easter Sessions, 1869; and an Account of the Receipts and Payments to the end of the year 1868.
- Lunatic Asylum for the County and Town of Nottingham. The Coppice, near Nottingham (supported by voluntary contributions), into which patients are received, who, not being paupers, are unable to pay the whole expense of their care and maintenance. Thirteenth Annual Report. 1868.
- The Report of the Northampton General Lunatic Asylum, from January 1st, 1868, to December 31st, 1868; also the State of the Accounts for the year.
- Thirty-first Annual Report of the Suffolk Lunatic Asylum. 1869.
- The Report of the Committee of Visitors of the Lunatic Asylum for the City and County of Bristol. 1868.
- County Lunatic Asylum, Stafford. Fiftieth Report for the year 1868.
- Pauper Lunatic Asylum for the County of Northumberland. Report and Accounts for 1868. Printed by order of the Court of Quarter Sessions. Asylum opened March 16th, 1859.
- The Sixteenth Annual Report of the Lincolnshire County Lunatic Asylum at Bracebridge, near Lincoln. 1869.
- Broadmoor Criminal Lunatic Asylum. Annual Report for the year 1868.

2. *Scotland.*

- Medical Report of the Royal Lunatic Asylum, Aberdeen. 1869.
- Second Annual Report of the Fife and Kinross Lunatic Asylum. September, 1868.

Reports of the Royal Lunatic Asylum of Montrose for 1868 and 1869.

Annual Report of the Royal Edinburgh Asylum for the Insane. For the year 1868.

Fifth Annual Report of the Inverness District Lunatic Asylum. May, 1869.

Fifty-fifth Annual Report of the Directors of the Glasgow Royal Asylum for Lunatics. 14th January, 1869.

Report of Murray's Royal Asylum, Perth. For the Triennial Period—1865 to 1868.

Twenty-eighth Annual Report of the Crichton Royal Institution and Southern Counties Asylum, Dumfries. For the year 1867.

3. Ireland.

Sixteenth Annual Report of the Killarney District Lunatic Asylum. For the year 1868.

Report of the Armagh District Lunatic Asylum. For the year ending 31st December, 1868.

Richmond District Lunatic Asylum, Dublin. Report of the Resident Medical Superintendent. For the year 1868. Ordered by the Board of Governors to be printed.

Seventh Annual Report of the Farnham House Private Lunatic Asylum at Finglass, near Dublin. For the year ending December 31st, 1868.

Annual Report of the Waterford Asylum for the Insane Poor for the District of the County and City of Waterford. For the year ending 31st December, 1868. Thirty-fourth year.

Report of the Sligo and Leitrim Hospital for the Insane. 1868. Printed by order of the Board of Governors. Established, 1855.

Thirty-ninth Annual Report of the Belfast District Hospital for the Insane. 1869.

4. Colonial.

Eleventh Annual Report of the Medical Superintendent of the Provincial Hospital for the Insane, Halifax, Nova Scotia. Printed by order of the Works Department.

5. United States of America.

Thirteenth Annual Report of the Trustees of the State Lunatic Hospital at Northampton. October, 1868.

Reports of the Board of Visitors and Trustees, and of the Treasurer and Superintendent of the New Hampshire Asylum for the Insane to the Legislature. June Session, 1869.

Ninth Annual Report of the Board of Directors and Officers of the Longview Asylum to the Governor of the State of Ohio. For the year 1868.

Report of the Pennsylvania Hospital for the Insane. For the year 1868. By Thomas S. Kirkbride, M.D., Physician in Chief and Superintendent. Published by order of the Board of Managers.

Reports of the Trustees and Superintendent of the Butler Hospital for the Insane. Presented to the Corporation at their Annual Meeting. January, 27th, 1869.

Twenty-sixth Annual Report of the Managers of the State Lunatic Asylum. For the year, 1868. Transmitted to the Legislature. January 29th, 1869.

Annual Report of the Managers of the Western Pennsylvania Hospital for 1868.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION;
QUARTERLY MEETINGS.

*The Fourth Quarterly Meeting of the Medico-Psychological Association
(for scientific discussion) will be held in London the last week in October.
The following Papers will be read :—*

“Ten Years’ Results,” being the Statistical Tables of the Medico-Psychological Association, with Remarks by C. Lockhart Robertson, M.D., and S. W. D. Williams, M.D.

“Voluntary Boarders,” by Stanley Haynes, M.D.

Notice of further papers to be sent to the Secretary.

HARRINGTON TUKE,

Hon. Sec.

37, Albemarle Street, W.
Sept. 25th, 1869.

A circular will be sent, before the meeting, to Members of the Association.



No. 72. (New Series, No. 36.)

THE JOURNAL OF MENTAL SCIENCE, JANUARY, 1870.

[Published by authority of the Medico-Psychological Association.]

CONTENTS.

PART I.—ORIGINAL ARTICLES.

J. B. Thomson, L.R.C.S., Edin.—The Hereditary Nature of Crime	487
J. Lockhart Clarke, M.D., F.R.S.—A Case of General Paralysis, with examination of the Brain, Medulla Oblongata and Spinal Cord	499
H. Charlton Bastian, M.A., M.D., Lond., F.R.S.—Consciousness	501
J. B. Tuke, M.D., Edin.—The Cottage System of Management of Lunatics, with suggestions for its elaboration and improvement	524
David Nicholson, M.B., Aberd.—Feigned Insanity, with cases	536
Stanley Haynes, M.D., Edin.—Voluntary Patients in Asylums	563
Occasional Notes of the Quarter.—Lunacy and Lunatic Asylums in France.—Clinical Wards for Lunatics.—Middle-class Asylums for the Insane.—The Case of Santa Nistri	577—587

PART II.—REVIEWS.

State of Lunacy in Great Britain and Ireland, 1868.—The Lunacy Blue Books	588
---	-----

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

German Psychological Literature. By John Sibbald, M.D., Edin	614
--	-----

PART IV.—PSYCHOLOGICAL NEWS.

Proceedings at the Quarterly Meeting of the Medico-Psychological Association, held in London, on the 28th October, under the presidency of Dr. C. LOCKHART ROBERTSON.—Report of Quarterly Meeting of the Medico-Psychological Association, held in Edinburgh, on the 25th November, 1869, under the presidency of T. LAYCOCK, Esq., M.D.—Correspondence.—Books received.—Appointments, &c.	630—662
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The Journal of Mental Science.

Original Papers, Correspondence, &c., to be sent by book post direct to Dr. ROBERTSON, Hayward's Heath, Sussex.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Haywards Heath, Sussex, or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents:—Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York.

Authors of Original Papers receive three extra copies of the Journal by Book-post. Should they wish for Reprints for private circulation they can have them on application to the Printer of the Journal, Mr. Bacon, Lewes, at a fixed charge of 30s. per sheet per 100 copies, including a coloured wrapper and title-page.

The copies of *The Journal of Mental Science* are regularly sent by Book-post (*pre-paid*) to the ordinary Members of the Association, and to our Home and Foreign Correspondents, and Dr. Robertson will be glad to be informed of any irregularity in their receipt or overcharge in the Postage.

The following EXCHANGE JOURNALS have been regularly received since our last publication:—

Annales Médico-Psychologiques; Zeitschrift für Psychiatrie; Vierteljahrsschrift für Psychiatrie in ihren Beziehungen zur Morphologie und Pathologie des Central-Nervensystems, der physiologischen Psychologie, Statistik und gerichtlichen Medicin, herausgegeben von Professor Dr. Max Leidesdorf und Docent Dr. Theodor Meynert; Archiv für Psychiatrie und Nervenkrankheiten, herausgegeben von Dr. L. Meyer und Dr. C. Westphal; Correspondenz Blatt der deutschen Gesellschaft für Psychiatrie; Irren Freund; Journal de Médecine Mentale; Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali; Annali Frenopatici Italiani Giornale del R. Manicomio di Aversa e Della Società Frenopatica Italiana Direiti dal dott. Car. B. G. Miraglia; Medizinische Jahrbücher (Zeitschrift der K. K. Gesellschaft der Aerzte in Wien); the Edinburgh Medical Journal; the American Journal of Insanity; the Quarterly Journal of Psychological Medicine, and Medical Jurisprudence, edited by William A. Hammond, M.D. (New York); the British and Foreign Medico-Chirurgical Review; the Journal of Anatomy and Physiology, conducted by G. M. Humphrey, M.D., F.R.S., and Wm. Turner, M.B., F.R.S.E.; the Dublin Quarterly Journal; The Lancet; Medical Times and Gazette; the Medical Mirror; the British Medical Journal; the Medical Circular; The Practitioner, a monthly Journal of Therapeutics, edited by F. E. Anstie, M.D.; the Glasgow Medical Journal; the Journal of the Society of Arts; Scientific Opinion, a monthly record of Scientific Progress at home and abroad; the Academy. Also the Morningside Mirror; the York Star; Excelsior, or the Murray Royal Institution Literary Gazette.



Fig. I.

Papier, "A case of General Paralysis"

To illustrate Dr Locockhart Clarke's

THE JOURNAL OF MENTAL SCIENCE.

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No. 72. NEW SERIES,
No. 36.

JANUARY, 1870.

VOL. XV.

PART 1.—ORIGINAL ARTICLES.

The Hereditary Nature of Crime. By J. B. THOMSON, L.R.C.S. Edin., Resident Surgeon, General Prison for Scotland, at Perth.

On the border-land of Lunacy lie the criminal populations. It is a debateable region ; and no more vexed problem comes before the Medical Psychologist than this—viz : where badness ends and madness begins in criminals. The inmates of Asylums and of Prisons are so nearly allied that “thin partitions do their bounds divide.” From large experience among criminals I have come to the conclusion, that the principal business of Prison Surgeons must always be with mental diseases ; that the number of physical diseases are less than the psychical ; that the diseases and causes of death among prisoners are chiefly of the nervous system ; and in fine that the treatment of crime is a branch of psychology.

The alliance of crime and insanity will become more obvious as we pursue the study of the Hereditary Nature of Crime in the criminal classes.

That profound observer of men, Michel de Montaigne, in his famous essays, has a paper “of the Resemblance of Children to their Fathers.” In that strange production he expresses his wonder why we receive the impressions, not only of the bodily form, but even of the thoughts and inclinations of our fathers. The grandson will be like his great grandfather, the nephew like his uncle. Pliny knew this, and tells us that in the family of Lepidus, at Rome, there were three—not successively, but at intervals—born with one and a similar eye, covered with a web. Congenital cases of

webbed fingers and toes are, by no means, rare. Still more singular and instructive is Montaigne's own case, which is thus told by himself. "I derive an infirmity from my father; he died of a great stone. He was never sensible of this disease till his 67th year. I was born about 25 years before his distemper seized him. Where could this malady lurk all the while? How was it so concealed that, till 45 years after my birth, I did not begin to be sensible of it." Such cases, which might be multiplied to any extent, shew the mysterious transmission of physical heritages, and prepare us to believe that psychical transmissions must necessarily go down to the offspring, giving even *the thoughts and inclinations of our fathers.*

Aristotle, speaking upon the heritage of moral depravity, refers to a man who denied his responsibility for beating his father, because, said he, my father beat his father, and he also (meaning his own child), will beat me when he becomes a man, *for it was in our family.* This taint of wickedness history details to us as running through the atrocious nature of the Borgias, the Farnese, and the Vicontes; and, in our country, the line of the Royal Stuarts. Lord Granville used to say of his own family, "They always quarrelled, and always will quarrel from generation to generation." Intimate and daily experience for many years among criminals has led me to the conviction that in by far the greatest proportion of offences *Crime is Hereditary.*

The proposition that crime is generally committed by criminals hereditarily disposed to it, I shall try to prove by shewing:

1. That there is a *criminal class* distinct from other civilized and criminal men.
 2. That this criminal class is marked by peculiar physical and mental characteristics.
 3. That the hereditary nature of crime is shewn by the *family histories* of criminals.
 4. That the *transformation* of other nervous disorders with crime in the criminal class, also proves the alliance of hereditary crime with other disorders of the mind—such as epilepsy, dipsomania, insanity, &c.
 5. That the *incurable* nature of crime in the criminal class goes to prove its hereditary nature.
-
1. When it is averred that *there is a criminal class sui generis* it is not denied that now and then crop out criminals of all kinds from all classes of men—from the lowest stratum

to the upper ten. Such are not the criminal class proper. Palmer and Pritchard, both professional men, and Madeleine Smith, from the West End; and the Lady Audleys, and the Henry Dunbars, so famous in sensational novels and dramas, do not belong to the criminal population, properly so called. The criminal class have a *locale* and a community of their own in our great cities. You never find them pursuing an honest trade or an honourable profession. They do not mingle in markets, and engage in commerce with civilized business men. The greatest number are thieves, Ishmaelites, whose hand is against every civilized man. There is a thieves' quarter—a devil's den, for these city Arabs. There is their Alsatia; in the midst of foul air and filthy lairs they associate and propagate a criminal population. They degenerate into a set of demi-civilized savages, who in hordes prey upon society, and of them the historian says, "In the hearts of our great capitals are a race as fierce as those who followed Attila, or marched in the ranks of Genseric." These communities of crime, we know, have no respect for the laws of marriage—are regardless of the rules of consanguinity; and, only connecting themselves with those of their own nature and habits, they must beget a depraved and criminal class hereditarily disposed to crime. Their moral disease comes *ab ovo*. They are born into crime, as well as reared, nurtured, and instructed in it; and habit becomes a new force—a second nature, superinduced upon their original moral depravity.

2. That there is a distinctive *Criminal Class* is shewn by the typical, physical, and mental peculiarities of the class. We all admit the distinctive characteristics of mankind, as seen in the black and white, the red and yellow, and other less marked varieties of mankind; but even among the civilized men of Europe there are castes and characteristics which cannot escape the eye of the natural historian and medical observer; and constitute here and there, in the midst of even cities and populous districts, human varieties.

The miners whose life is passed below ground chiefly—who from generation to generation pursue the same calling—form a colony by themselves, and, being latest of all the industrial classes to emerge from serfdom, are quite a marked variety of men and women. The fishermen in some parts of our coast never change their vocation, nor *locale*—intermarry among themselves, and preserve distinct physical and mental characteristics unchanged for centuries. Of all these varieties, we know none whose typical features and

caste are so notable as those of the criminal population. They are a low class, and their physique shews it so plainly that all prison officials or detective officers could pick them out of any promiscuous assembly at church or market.

This reminds one of how this fact is set forth by our great dramatist. One of the murderers in the tragedy of Macbeth, pleading for his class, says :—

“ We are men, my liege ! ”

Macbeth replies :

“ Ay, in the catalogue ye go for men,
As hounds, and greyhounds, mongrels, spaniels,
Shoughs, water rugs, and demi-wolves are classed
All by the name of dogs ; the valued file
Distinguishes the swift, the slow, the subtle
According to the gift ; and so of men.”

Inferior men, criminals, are afterwards appointed by Shakespeare as not having “a station in the *file*,” but “*in the worst rank of manhood.*” Hence the military terms *rank* and *file*; the former being a class of superior order, the latter of *low rank* and *inferior caste*.

The physical characters of the criminal class indicate a low type of men and women, and walking through a large prison, if one of a better class is there, even in the prison garb, he is easily known from the common criminal. A decent industrial operative, a cottar, a clerk, a railway official, an inspector of poor, and such like, stand out from the others by a better physical appearance. The common thief, or robber, or garrotter (thieves being the chief prisoners), have all a set of coarse, angular, clumsy, stupid set of features and dirty complexion. The women are all ugly in form and face and action, without the beauty of colour, or grace, or regularity of features, and all have a sinister and repulsive expression in look and mien. These remarks apply to the *habitues* who go out and into prison now and then, who live by crime, and have been born in crime, and of whom an accomplished writer says they are as distinctly marked off from the honest industrial operative as “black-faced sheep are from the Cheviot breed.”*

* NOTE.—As in all families or races where physical degeneration is found, so among the criminal class we have very often abnormal states—such as spinal deformities, stammering, imperfect organs of speech, club foot, cleft-palate, hare-lip, deafness, congenital blindness, paralysis, epilepsy and scrofula, &c. These usually accompany congenital weakness of mind. It would seem that bodily and mental health are so linked together that deformity is at one time manifested, and at another time some mental disorder.

From such physical we naturally expect low *psychical characteristics*. Physical degeneration must beget mental and moral depravity.

The writer has visited the great prisons of England, Ireland, and Scotland; and in all these the authorities, governors, chaplains, surgeons, warders, concur in stating that prisoners, as a class, are of mean and defective intellect, generally stupid, and many of them weak minded and imbecile.

Perhaps the capabilities of classes of men are more distinctly seen at school than even in after life. The miners, who are an inferior class and caste of people, are admitted by teachers to be extremely slow to learn. Training capability is increased by hereditary influence. Before the establishment of reformatories, I used to see daily some 40 or 50 juvenile prisoners being taught together, and they seemed very dull and stupid in taking up either secular or sacred knowledge. Their experienced teacher said of this class : "I consider that more than a third of these boys are of imbecile mind. They make little progress comparatively ; have bad memories, and require every lesson to be kept long and continuously before them. If one-third are imbecile, I could not speak very favourably of the other two-thirds. They seem all deficient in the power of attention and application, from want of regular habits previously. They are self-willed, and those who make creditable progress are the exceptional cases." The juveniles at Parkhurst were reported by the Government Educational Inspectors "as deficient in physical organization—a large number weak in body and mind, and by no means having the educational aptitude of the higher industrial classes."

A medical friend, much conversant with lunacy, and with as much experience among prisoners as any man I know, also a shrewd observer of men, left the following among his notes, now in my possession. I give the *ipsissima verba* :—"I have long been struck with the various characters of our prisoners ; their entire obliquity of all moral feelings, the propensity of their nature, and their impracticability. Neither kindness nor severity has any influence on such people, but they go on from day to day in devising and doing wrong, although their conduct entails upon them further privation. Many of them have been habitual drunkards, and their constitutions are broken down and enfeebled by this vice, added to their irregularity, and

often want of food, wretched, unwholesome lodgings, spare clothing, and filth. In all my experience I have never seen such an accumulation of morbid appearances as I witness in the post mortem examinations of the prisoners who die here. Scarcely one of them can be said to die of one disease, for almost every organ of the body is more or less diseased; and the wonder to me is that life could have been supported in such a diseased frame. Their *moral nature seems equally diseased with their physical frames*; and whilst their mode of life in prison reanimates the physical health, I doubt whether their minds are equally benefitted, if improved at all. *On a close acquaintance with criminals of eighteen years' standing, I consider that nine in ten are of inferior intellect; but that all are excessively cunning.*" Not to heap up proofs which are ample, I shall only add to this my own testimony as a prison surgeon, as to the mental condition of prisoners generally. Out of a population of 5,432 no less than 673 were placed on my registers as requiring care and treatment on account of their mental condition. The forms of mental disorder were—

Weak-mindedness or Imbecility in	580
Ditto and Suicidal	... 36
Epileptic	... 57

This table showed 12 per cent. mentally weak in different degrees, and all this, exclusive of those prisoners who had become insane, and had been transferred to the lunatic department for criminals. One remarkable feature of the above table of weak-minded prisoners is that the greatest number were seen to be weak minded on admission, or a few weeks thereafter, apparently from *congenital causes*. Similar observations as to the low mental calibre of criminals are well known in the Irish and English prisons also, but have been attributed to the effects of imprisonment rather than hereditary deterioration.

3. *The Family Histories of the Criminal Class indicate that crime in them is Hereditary.*

Many who cannot deny physical heritages of infirmities and diseases hesitate to admit the heritage of immorality, and yet the relations of mind and matter, body and soul, are now pretty generally received by the schools of philosophy and theology.

The analogy of what happens by habits of training among some of the lower animals, proves that class habits must necessarily be transmitted to the different classes of society.

Among dogs we have a modification of structure and function made fixed and permanent, and more or less hereditary. Habits got by training are transmitted to the offspring of certain breeds of dogs as their very nature. It is so in the wolf dog and the hound. The pointer also, from original teaching, shews as the pup, while yet in the farm yard, a tendency to point at every fowl or bird it sees, before it has ever been a-field. The shepherd dogs, perhaps, above all others, show inherent sagacity of an extraordinary kind from transmitted habits by training. It is the same in certain castes and races and communities of the human family; and is the transmission of thieving and other criminal habits to form an exception to other analogies?

One of the most remarkable examples of a criminal family I know of is as follows:—

Three brothers had families amounting to 15 members in all. Of these 14 were utterers of base coin; the fifteenth appeared to be exceptional, but was at length detected setting fire to his house after insuring it for four times its value. The importance of checking, if possible, by legal restrictions such criminal tendencies is brought out in this case, when it is calculated that thousands of offences might have been prevented by these three brothers being *permanently* imprisoned before they became fathers of families, and thereby perpetuated crime by heritage.

The family history of criminals shows their hereditary tendencies as a class. This kind of information is not very easily got at, for they are constantly changing their names; and the following is a very imperfect approximation to entire facts. In the prison, under my medical charge, I ascertained the following:—

At the same time 109 prisoners were known to be in the same prison out of 50 families. Of one family eight were known—often two or three at the same time. The father had been several times under long sentences; and since 1843 this family had been chiefly supported at the public expense in prisons. The relations I found in prison were the father, two sons, three daughter, one daughter-in-law, and a sister-in-law. Doubtless other connections not discovered were there also. When these notes were taken there were in this prison three cousins (two being sisters), two aunts, and two uncles of the same family. Of two families, six were in prison about the same time, viz.—four brothers and two sisters.

Of three families there were three prisoners from each family, chiefly brothers and sisters. Also several mothers and their daughters at the same time. From four families, two brothers belonging to each family. From eight families, a brother and a sister. From ten families, two sisters. Of husbands and wives, professedly married, 35 couples were known, but double this number would be probably nearer the truth. These investigations were not carried out very inquisitorially.

The following instances are from the reports of a gentleman of large experience in Glasgow :—

In one family there were five criminals—one male and four females ; the last was executed. The girls had lived by thieving and profligacy. Their evil propensities seem to have been inherited from the mother ; the mother also being a poor silly creature.

In another family were two males and two female criminals, all transported for theft they inherited from the mother.

In another family four females were all thieves ; often in prisons ; inherited from father.

In another family, three girls, all wicked ; two of them were banished ; father and mother criminals.

Again, two males and two females were active thieves by inheritance.

Again, one male and two females, incorrigible thieves ; their mother a thief ; grandmother also.

Again, two males and two females ; three transported.

Again, three girls, all thieves by the mother's heritage.

Again, a family of four ; all thieves by the mother.

Again, one male and two females, with the mother, all sentenced to transportation.

Again, four or five in this family, all thieves ; two sentenced to transportation ; inherit from the father.*

Let me wind up this dark roll with an example from a French report. The history of a family in Bayeaux is this—One of them had been sentenced to the *travaux forcés* for life, having committed assassination. Five remained—three brothers, one sister, and her husband, who all became robbers. Their uncles and aunts had been in *les bagnes* ; one nephew

* M —— when in the family-way possessed an irrepressible desire to steal and rob ; all her children inherited the same tendency.

also, and others, took to criminal courses by an hereditary proclivity that seemed quite irresistible.

4.—The Hereditary taint and tendency to crime further appears from the resemblance in the transmission to other Hereditary Maladies.

One of the leading characters in the natural history of hereditary depravity is the singular transmutation from physical to psychical diseases; and to diversities of these diseases, interchanging often with crime. Esquirol says, that of all diseases insanity is the most hereditary, and one-third or one-fourth of the cases of insanity are found so. But if we were to take into account the various transformations cropping out in abnormal states of the body, in weak-mindedness, in epilepsy, in paralysis, and even in crime, the heritage would still more appear. Various writers have proved that the *lower forms* of mental disease as silliness and imbecility are, in the most remarkable degree, transmissible.

In cretinism there is a strange relation betwixt crime and insanity. Zallner says that at Salsburg it so happens that crime among women there exceeds the general average by five per cent.; the exceptional excess in idiocy and madness having a corresponding excess in crime. In cretinism it also comes out that at one time it manifests itself in low and deformed states of the body, alternating and diverging in the same family into idiocy, epilepsy, eccentricity, and crime.

Dipsomania shows in the psychological history of families the same curious transformation of diseases, and my enquiries lead me to the belief that in almost all cases hereditary causes lead to dipsomania. This is a disease where we are often puzzled to distinguish between the disease and the vice; the mental and moral malady running into each other. The hereditary tendency, although ignored by the legal mind, is a most valuable guide to the medical inquirer. Some years ago, in a rural district where the families do not fluctuate, and their history for generations could be got at, I examined into the cases of insane drinking which occurred, and the singular interchange or transformation into other mental disorders was brought out as by the following facts I tabulated out of ten families:—

Dipsomaniacs living	...	...	19
Dipsomaniacs dead	...	...	18
Epileptics	...	...	3
Insane	...	...	10

In one of these families there were four brothers who fell victims to insane drinking, and three of these died in the meridian of life. One became paralytic, several sisters were intemperate, one granddaughter insane, and vicious and criminal acts transpired among them. There also were physical deformities, and silliness, and eccentricity at times in one or more of the branches of these families. As among the criminal class so among these families, and among the cretins, epilepsy is a prevalent malady. This disease is calculated to affect three in 1,000 of the cretin population. Out of a prison population for ten years, amounting to 6,273, or 627 per annum, the percentage of criminal epileptics under my charge was 0·94, or nearly one per cent. per annum, very different from the army and civil populations of England, where the death-rate of epileptics is estimated at 0·009 per cent. only. There is, therefore, a great excess of epilepsy among criminals.

Insanity shows also a great excess, one out of 140 prisoners among the criminal population becoming insane in my experience.

I have thus attempted to show that the criminal class is a distinct one from all other social classes ; that this class has peculiar, physical, and mental characteristics ; that their moral depravity is transmitted hereditarily through their families ; and that the hereditary tendency further appears from crime being transmitted like other hereditary maladies, and accompanies generally hereditary deterioration, giving strong proof that *crime is hereditary in the criminal class.*

These proofs are strengthened by

5.—*The incurable nature of crime in the criminal class.*

This is the great corollary from the whole study, viz., that crime is intractable in the highest degree, and must be so because it is hereditary. Crime is “bred in the bone,” and how can it be got out of the flesh? The criminal class are born in crime, and what treatment in such cases can be made available?

The following facts and figures are from a report I drew up in 1866, with the view of ascertaining the effects of prison discipline in the cure of crime. Since the year 1855, all the female convicts of Scotland sentenced to transportation or penal servitude have undergone their punishments in the General Prison for Scotland, of which the writer is in medical

charge. The total number during the decennial period had been 904 under the following terms of imprisonment:—

Years.						
3	...	...	...	...	...	84
4	...	...	...	...	...	446
5	...	...	...	...	...	73
6	...	...	...	...	...	92
7	...	...	...	...	...	51
8	...	...	...	...	...	62
10	...	...	...	...	...	33
12	...	...	...	...	...	2
14	...	...	...	...	...	10
15	...	...	...	...	...	26
21	...	...	...	...	...	12
Life	...	...	...	...	...	13
<hr/>						
Total	...	...	...	...	...	904

These are all the admissions from October, 1855, to December, 1866. Of these 904, even after suffering once or oftener long sentences, there have been re-convicted and re-admitted as under, viz.:—

Had undergone sentence to transportation or penal servitude in the prison once or oftener	... }	211
Had before undergone sentences to transporta- tion or penal servitude here or elsewhere	... } ...	229
Total	... ...	440

And so out of 904, no less than 440—after their long sentences, and within these few years—returned again to prison discipline. Nearly one half of the whole convict women of Scotland were thus known to have been re-convicted in ten years, and others must have been committed elsewhere throughout the kingdom. The painful fact is before us that time after time the criminal classes lapse into crime, and are rarely improved by any form of prison discipline. When extending these notes, I looked at the calendar of crime in this city, and of persons to be tried before the Circuit Court, ten out of twelve were known to be offenders—old offenders of the criminal class. Such facts press it strongly on my mind that crime (in the general) is a moral disease of a chronic and congenital nature, intractable in the extreme, because trans-

mitted from generation to generation. "The fathers have eaten sour grapes, and the teeth of the children are set on edge." So says truly the Hebrew proverb. Is it to be marvelled at, if these premises are correct, that all modes of criminal treatment, severe or mild, have failed in giving any thing like satisfactory results? Is it strange that our criminal legislation has gone from one extreme to another, and been like the web of Penelope, a system of doing and undoing? We fail to wash the blackamoor white; we cannot raise the negro character beyond a certain stage of improvement. The criminal hereditary *caste* and character, if changeable, must be changed slowly, and how to do it must be to sociologists and philanthropists always a *questio vexata*, one of the most difficult state problems.

I offer the following conclusions from the foregoing examen :—

1.—That crime being hereditary in the criminal class, measures are called for to break up the *caste* and community of the class.

2.—That transportation and long sentences of habitual criminals are called for in order to lessen the criminal offenders.

3.—That old offenders can scarcely be reclaimed, and that juveniles brought under very early training are the most hopeful; but even these are apt to lapse into their hereditary tendency.

4.—That crime is so nearly allied to insanity as to be chiefly a psychological study.

A Case of General Paralysis, with Examination of the Brain, Medulla Oblongata and Spinal Cord. By J. LOCKHART CLARKE, M.D., F.R.S., &c.

(*Read at the Annual Meeting of the Medico-Psychological Association, held at York, August 2nd, 1869.*)

THIS case was in the Glasgow Royal Infirmary under the care of Dr. Gairdner, who sent me for examination portions of the cerebral hemispheres, the pons Varolii, the medulla oblongata, and spinal cord. The following were the chief and most prominent symptoms :—

Imperfect articulation and swaying gait, characteristic of General Paralysis of the Insane, inequality of pupils, well marked delusion as to the origin of the disease; acquired habits of lying, swearing, and stealing.

The patient complained of pain in the head, about the vertex and forehead, with slight pain in the back and in the thigh. He appeared stupid and dull, with a tendency to delirium; the pupils were rather unequal in size, and both imperfectly sensible to light. There was slight prominence of the 8th dorsal vertebra with some pain on percussion. His articulation was somewhat impaired, and his gait was rather unsteady, particularly when he endeavoured to turn a corner; but he stands the equilibration test very well.

Such was the substance of notes reported by Dr. Gavin P. Tennent. To these Dr. Gairdner, eighteen days later, added the following:—Mental unsteadiness, if not positive delirium. The patient talks in an exaggerated way about trifles, and is addicted to bad language on very slight provocation. He talks about going out, and says there is nothing the matter with him. His gait is unsteady, with a lurching movement on one side, as if in liquor, but with great boldness, and even with a buoyant, bragging way, at times hastening into a run; but he does not appear to be conscious of this imperfection. The impediment in articulation seems to be on the increase. “It consists,” says Dr. Gairdner, “of no particular fault in the utterance of any particular sound, but a liability to hesitate over all sounds, vowels and consonants, especially the latter, but yet not amounting to stammering, rather a character of indecision, as if for a moment he had forgotten the word; but yet not having forgotten it, as he always brings it out correct.” The right pupil is at least one-third larger than

the left. From the time these notes were taken the patient got gradually worse, became amaurotic and died.*

The portions of the cerebral hemispheres sent to me for examination were taken chiefly from the vertex. In these I found appearances of a very remarkable description ; for on making slices with a very sharp instrument through the convolutions, their central white substance presented numerous cavities, of a round, oval, fusiform, crescentic, or somewhat cylindrical shape, and varying from the size of a small pea, or a barley-corn to that of a grain of sand ; so that the surfaces in some sections strikingly resembled the cut surface of Gruyère cheese, while those of others had more resemblance to a slice of the crumb of bread. In fig. 1, at *a*, *b*, and *c*, groups of these cavities are represented in their natural positions, and of their natural size. For the most part they were empty, had perfectly smooth walls, without any lining membrane, and seemed as if they had been sharply cut out of the tissue. A few, however, were found to contain what appeared to be the remains or the débris of blood-vessels mixed with a few granules of haematoxin. Some of them extended to a considerable depth, while others, chiefly of largest diameter, were very shallow. One or two of these (as at *d*, fig. 1) were found to communicate with the surface of the convolutions (*e e*) through the natural fissures between them, and to contain a perfect blood-vessel (*f*) with its branches. On removing the blood-vessel the wall of the broad but shallow cavity was seen to be perforated by a multitude of minute orifices through which the finer branches of the vessel had passed. These latter circumstances, together with a comparison of the shape and course of some of the natural fissures transmitting blood-vessels from the surface, render it almost certain that at least the greater number of these cavities were perivascular spaces or canals which originally contained blood-vessels surrounded by their peculiar sheaths, and which subsequently became empty by the destruction and absorption of those vessels.

These remarkable vacuoles or canals were not confined to the cerebral convolutions. I found them scattered through the optic thalamus, particularly on the right side. In the pons Varolii they were particularly numerous and large. One group, some of which coalesced, was situated at the posterior part of the pons on the right side, close to the roots of the facial nerve, and encroaching on the gray

* A more detailed account of the case may be found in the *Glasgow Medical Journal*, New Series, No. 16, August, 1867.

tubercle, which a little higher up gives origin to the greater root of the trigeminus. Another group was found in the middle of the anterior pyramid of the left side, as it ascends through the pons. In the upper part of the medulla oblongata similar cavities were observed, but they were neither so large nor so numerous. On the left side, a *smooth*, cylindrical and longitudinal canal traversed the gray tubercle, as if it had been bored by a carpenter's tool. Neither the *lower* part of the medulla oblongata, nor the spinal cord presented any appreciable deviation from the normal state.

Although it was only in the *white* substance of the convolutions that these cavities were found, yet certain other morbid changes were observed in their gray substance. In some places the nerve-cells were unusually loaded with pigment-granules; in other places they had undergone, to a greater or less extent, the process of disintegration; while here and there were scattered, over areas of variable extent, irregular masses of fat-particles of different shapes and sizes.

Consciousness. By H. CHARLTON BASTIAN, M.A., M.D. Lond., F.R.S.

"All theories of the human mind profess to be interpretations of Consciousness: the conclusions of all of them are supposed to rest on that ultimate evidence, either immediately or remotely. What Consciousness directly reveals, together with what can be legitimately inferred from its revelations, compose by universal admission all that we know of the mind, or, indeed, of any other thing. When we know what any philosopher considers to be revealed in Consciousness, we have the key to the entire character of his metaphysical system."

John Stuart Mill.

"Aristotle, Descartes, Locke, and philosophers in general, have regarded Consciousness not as a particular faculty, but as the universal condition of intelligence. Reid, on the contrary, following probably Hutcheson, and followed by Stewart, Royer-Collard and others, has classed Consciousness as a co-ordinate faculty with the other intellectual powers; distinguished from them not as the species from the individual, but as the individual from the individual. And as the particular faculties have each their peculiar object so the peculiar object of Consciousness is the *operations of the other faculties themselves to the exclusion of the objects* about which these operations are conversant."

Sir William Hamilton.

THE above quotations may suffice to impress the majority of readers with the conviction that those who wish to investigate the problems of Mental Science, should not engage in their task till they have sifted, to the best of their ability, all obtainable evidence as to the nature and mode of evolution of this mysterious something known as 'Consciousness.'

They will probably inspire many, also, with a feeling of the desirability of bringing all available evidence to bear upon the possible solution of the much disputed problem which we have presented to their notice in the words of Sir William Hamilton. Consciousness being the indispensable basis of all real knowledge, surely no subject can be more interesting than an enquiry—merely tentative though it may be—as to its nature and mode of evolution, including as this does a consideration of the question as to what parts of our organism gave rise by their activity to this universal condition of sentiency. But the subject is as difficult and as subtle as it is interesting—and is rendered all the more complex because it has been so often written about by men who, though great philosophers and abstract thinkers, have not always possessed an adequate knowledge of Physiology, wherewith to test the possible truth or falsity of their theories. The subject is strictly, in all its most important aspects, one pertaining to the physiology of the nervous system ; still it is common ground for philosophy and for physiology—belonging to neither exclusively, though to both in part. The more it receives a strictly scientific treatment, starting from a basis of physiological data, the more hope will there be for the stability of the super-imposed theories. The subject must not be delivered over too exclusively to the one or to the other set of workers. There must be joint labour and co-operation. And there has, indeed, been springing up of late a rapidly growing tendency to recognise this importance of studying mental philosophy from a purely physiological standpoint, so that indications are not wanting that the subject will thus soon be cleared from the obscuring influence of many ancient and false theories—these gradually disappearing to make room for others, which, as products of a double solicitation, will be as much in harmony with the generalisations of physiology, as they are with those of philosophy.

What does or can Consciousness actually reveal to us ? This is one of the questions that has agitated the minds of philosophers in all ages, and which on account of its extreme interest and difficulty of solution has given rise to the various metaphysical systems. Are we directly conscious of a *non-ego*, and if so, what is its nature—or does the *ego* itself limit the sphere of our Consciousness ? In accordance with the different answers that have been given to these questions, so there have arisen different solutions of the great metaphysical problem as to

the proof of the existence or non-existence of a material world. These are just the very problems, however, which physiology, in its present stage, can and would help philosophy to solve. In fact, this has been so ably, and so exhaustively shown by Mr. Herbert Spencer in the recently issued numbers of his *Principles of Psychology*, that from our point of view nothing more would seem necessary to be said on the subject. What we now propose to do is to endeavour to reconcile some of the principal modern doctrines concerning Consciousness; to examine into the nature of the two theories alluded to in the words of Sir W. Hamilton, from a physiological point of view; and by the help of such conclusions as we may arrive at, to show how imperatively the ordinary definition of Mind needs to be widened.

Philosophers in general, we are told, and amongst them Sir W. Hamilton himself, "have regarded Consciousness not as a particular faculty, but as the universal condition of intelligence;" whilst Reid, Dugald Stewart, and others, "have classed Consciousness as a co-ordinate faculty with the other intellectual powers." No clearer exponent of the first theory can be selected than Mr. James Mill, when he says* :—"If we are in any way sentient,—that is, have any of the feelings whatsoever of a living creature, the word conscious is applicable to the feeler, and Consciousness to the feeling: that is to say, the words are generical marks, under which all the names of the subordinate classes of the feelings of a sentient creature are included. When I smell a rose, I am conscious; when I have the idea of a fire, I am conscious; when I remember, I am conscious; when I reason and when I believe, I am conscious; *but believing and being conscious of belief are not two things, they are the same thing*: though this same thing I can name at one time without the aid of the generical mark, while at another time it suits me to employ this generical mark." Now the only part of this quotation concerning which there is the least room for any suspicion of dubiousness is that which we have placed in italics—"believing and being conscious of belief are not two things, they are the same thing." How is this to be explained? Mr. Mill had really given the necessary explanation in a preceding paragraph, when he said:—"Having a sensation and having a feeling are not two things. The thing is one, the names only are two. I am pricked by a pin. The sensation is one;

* Analysis of the Human Mind, I., p. 172.

but I may call it sensation, or a feeling, or a pain, as I please. Now, when having the sensation, I say I feel the sensation, I only use a tautological expression ; the sensation is not one thing, the feeling another ; the sensation is the feeling. When, instead of the word feeling I use the word conscious, I do exactly the same thing—I merely use a tautological expression. To say I feel a sensation, is merely to say that—I feel a feeling, which is an impropriety of speech. *And to say, I am conscious of a feeling is merely to say that I feel it.* To have a feeling is to be conscious, and to be conscious is to have a feeling.” All this seems to show clearly enough that what Mr. James Mill means by Consciousness is nothing else than what is ordinarily understood by ‘self-consciousness’; that a person could ‘feel’ or could ‘know’ without being self-conscious, he would deny—the very words themselves would have no significance unless they implied this element of self-consciousness.

And this also seems to have been the opinion of Sir W. Hamilton. He said*—“Consciousness comprehends every cognitive act, in other words, whatever we are not conscious of that we do not know. It is not one of the special modes into which our mental activity may be resolved, but the fundamental form, the generic condition of them all.” And his exact view is perhaps rendered even more obvious by the following sentences †:—“*Consciousness is not to be regarded as aught different from the mental modes or movements themselves.* It is not to be viewed as an illuminated place within which objects coming are presented to, and passing beyond, are withdrawn from observation ; nor is it to be considered even as an observer—the mental modes as phenomena observed. *Consciousness is just the movements themselves rising above a certain degree of intensity.*” But though the mental state and consciousness are one and indissoluble, because nothing—that is, no nerve action—is called a mental state unless accompanied by Consciousness ; still Sir W. Hamilton professes to be able to regard them as different aspects of the same fact, or as the same fact regarded in different relations. “Consciousness,” he says, † “is the self-affirmation that certain modifications are known by me, and that these modifications are mine.” Now although it will be a question needing subsequent consideration as to what is the nature of these “modifications” which are “known” to the “me” or Consciousness,

* Dissert. on Reid, p. 810. † Supplem. to Reid, p. 932. ‡ Discussions, p. 48.

it seems evident that by this latter word Sir W. Hamilton attaches no other meaning than that which is understood by ‘self-consciousness :’ this being a conclusion which is still further strengthened by his definition of the word. Consciousness with him * “is the recognition by the mind or *ego* of its own acts or affections.” And it is necessary to insist upon this point, because so many other passages occur in various parts of Sir W. Hamilton’s writings, which would seem to imply something quite different. These actual or seeming contradictions being, however, more explicable if we read them by the light of Sir W. Hamilton’s Realistic doctrines of Perception. Thus, he says †:—“In an act of knowledge my attention may be principally attracted either to the object known, or to myself as the subject knowing ; and in the latter case, although no new element be added to the act, the condition involved in it, *I know that I know*, becomes the primary and permanent matter of consideration.” Now, in this illustration, Sir W. Hamilton deliberately makes use of the word ‘attention,—a word which by many is considered synonymous with self-consciousness, and which would, we suppose, be universally admitted to connote Consciousness as its most fundamental quality. Hence we may use the two words almost interchangeably ; and if in the above quotation we make such an exchange, we shall find Sir W. Hamilton saying that, in an act of knowledge (existing and itself a conscious state only by reason of the co-existence of self-consciousness) his self-consciousness may be principally attracted either to the object known or to himself as the subject knowing. But what meaning is there in such a statement ? His self-consciousness (attention) may be directed to the subject knowing ! Is not the “subject knowing” this very self-consciousness itself ? What else are we to conclude when he tells us that consciousness is “the self-affirmation that certain modifications are known by me, and that these modifications are mine ;” or that it is “the recognition by the mind or *ego* of its own acts and affections ?” We may ask also what are these “acts and affections,” or “modifications,” of which we become conscious ? Whatever they are, they must be similar to that which he alludes to above as the “object known,” and to which he says his attention (consciousness) may be directed. But until Consciousness has been directed to them, there is nothing existing which, in

* Lectures, Vol. i., p. 193.

† Lectures I., p. 195.

the ordinary acceptation of the words, can be named either an “object known” or an “act or affection” of the “mind or ego.” To one who is not a Natural Realist, nothing could be supposed to exist but a mere (unconscious) nerve action. Thus we find Sir W. Hamilton using language and modes of expression which would be only justifiable if, with Reid and Stewart, he had believed, rather than had contemptuously rejected the notion, that Consciousness is a special faculty, whose business it is to take cognizance of the operations of the other faculties—that is, that it is the result of the action of a special organ, which is subject to be called into activity by molecular disturbances arising in other nerve elements.

Thus it seems quite evident that by the word Consciousness Mr. James Mill and Sir W. Hamilton mean nothing different from what is understood as ‘self-consciousness;’ so that when they maintain that Consciousness is the fundamental condition of all intelligence or feeling, they mean, simply, that if we are not self-conscious we cannot in any way be said to know, or feel, or have what is called knowledge. Whether right or wrong, or however inadequate the view may be, this is obviously their conclusion.

And now, if we turn our attention to the opinions of Dugald Stewart, as the best exponent of that doctrine of Consciousness to which Sir W. Hamilton objects, we shall be able to see how far there is any real difference between the views of the two schools, and in what the difference consists. Stewart maintained * that Consciousness “denotes the immediate knowledge which the mind has of its *sensations and thoughts*, and in general of *all its present operations*.” Now this is a definition precisely similar in its scope to that of Sir W. Hamilton, and it is as obviously incompatible with the main doctrine of which it formed part as his will prove to be. We still require to ask what is the nature of a “sensation” or of a “thought” before it becomes an object of immediate knowledge by the mind—that is, before we become conscious of the one or of the other. Obviously whatever they may be, we are not warranted in applying these names to them; since such names are only applicable to certain conscious states. The “sensations and thoughts” before they are immediately cognized by the mind through the intervention of consciousness, must, however, be in every

* Elements of Philos. of Human Mind. Vol. i., p. 13 (Hamilton's Ed.)

way comparable to what Sir W. Hamilton speaks of as the mental "acts and affections" that are cognized by the *ego* in consciousness. And as we have before suggested, it would seem almost impossible that these could represent anything else than mere unconscious nerve changes. But when we find Stewart adding:—"Of all the present operations of the mind, consciousness is an inseparable concomitant," it may seem still more surprising why Sir W. Hamilton should so strongly object to Stewart's doctrine.

Thus Stewart is quite in accord with Sir W. Hamilton and Mr. James Mill as to the real meaning of consciousness; and, moreover, just as the former says it is "the fundamental condition of all intelligence," so Stewart maintains that it is an "inseparable concomitant" of all the present operations of the mind. But the real cause of disagreement lies in this: Stewart, following Reid, did *classify* Consciousness as one of the intellectual faculties, co-ordinate with Attention, Conception, Memory, &c., and regarded it as "distinguished from them, not as the species from the individual, but as the individual from the individual." Sir W. Hamilton adds,* however, in his statement of Stewart's theory:—"As the particular faculties have each their peculiar object, so the peculiar object of Consciousness is the *operations of the other faculties themselves, to the exclusion of the objects about which these operations are conversant.*" This was the portion of Stewart's doctrine which more especially stirred up Sir W. Hamilton's antagonism.

His objections were expressed in this way:—"This analysis we regard as false. For it is impossible: in the *first* place to discriminate Consciousness from all the other cognitive faculties, or to discriminate any one of these from Consciousness; and in the *second*, to conceive a faculty cognizant of the various mental operations, without being also cognizant of their several objects."

Now with regard to the *first* part of Sir W. Hamilton's criticism, it may be said that although Stewart did classify Consciousness as one of the intellectual powers, this can really be considered as significant only—that he *conceived the possibility* of Consciousness being itself an independent function; though his definition of this state clearly showed that, with Sir W. Hamilton, he believed it to be practically impossible "to discriminate Consciousness from all the other

* *Essay on Philosophy of Perception.*

cognitive faculties, or to discriminate any one of these from Consciousness." He expressly stated that of all the present operations of the mind Consciousness is an inseparable concomitant. And, therefore, he certainly had not sufficient grounds for *classifying* Consciousness as an independent function, although he might have been quite justified in suggesting the possibility that it was really such in its origin, or, as we should prefer to frame it, that it might be the function of a distinct organ, even though that organ was always called into activity in conjunction with some other. By separating Consciousness altogether in his classification from the so-called mental faculties, he at the same time deprived these latter of all right to be entitled mental faculties. Having lost their conscious element, they had lost that which, in the ordinary acceptation of the term, alone entitled them to be called mental. Not to speak of the confusion likely to result from classifying Attention as a something different from and co-ordinate with Consciousness, it must be seen that the words Memory, Imagination, and Judgment had no title to be considered as names of Mental faculties, unless these several words were intended to imply, in each case, the co-existence of Consciousness as a fundamental attribute, in addition to that which was peculiar to the several faculties themselves. These names are, in fact, the appellations of different kinds or states of Consciousness ; and that which is peculiar to each, that which in conjunction with Consciousness gives rise respectively to Memory, Imagination, or Judgment, has received no name in Stewart's philosophy—though in his definition of Consciousness he altogether unwarrantably speaks of such processes as "sensations and thoughts," or, more generally, as "present operations" of the mind. But all such processes, so long as they had not been comprehended within the sphere of Consciousness, would, in accordance with Stewart's views, have been beyond the pale of Mind—Consciousness was, in his opinion, an "inseparable concomitant" of all states and operations which were entitled to be called mental.

Sir W. Hamilton's *second* objection is, that it is impossible to conceive a faculty cognizant of the various mental operations, without being also cognizant of their several objects. But this is an objection which loses all its force with those who are not believers in his particular doctrines of Perception. Reid said, "I am conscious of perception, but not of the object I perceive ; I am conscious of memory, but not of

the object I remember," and though at the same time he wisely offered no arguments to *prove* the existence of a material world, he took it for granted, on the faith of a "belief," which he considered "as an ultimate fact in our nature." But this uncertainty would not do for Sir W. Hamilton—he could not rest his faith in an External World upon a mere belief; with him it must be a matter of absolute Knowledge; and he, accordingly, vehemently proclaimed as infallibly true a theory of Perception, which very many of his successors as unhesitatingly reject. Perhaps nowhere has he more explicitly and forcibly stated his own doctrine than in the following passage* :—"We are immediately conscious in perception of an *ego* and a *non-ego* known together and known in contrast to each other. This is the fact of the Duality of Consciousness. It is clear and manifest. When I concentrate my attention in the simplest act of perception, I return from my observation with the most irresistible conviction of two facts, or rather two branches of the same fact; that I am, and that something different from me exists. In this act I am conscious of myself as the perceiving subject, and of an external reality as the object perceived; and I am conscious of both existences in the same indivisible moment of intuition. The knowledge of the subject does not precede, nor follow, the knowledge of the object; neither determines, neither is determined by the other. Such is the fact of perception revealed in Consciousness." And that in the act of perception, he *must* be conscious, or have an immediate knowledge, of the object of perception seemed to Sir W. Hamilton to be a matter of axiomatic certainty. For, he says,† "The assertion that we can be conscious of an act of knowledge without being conscious of its object is virtually suicidal. A mental operation is only what it is, by relation to its object; the object at once determining its existence, and specifying the character of its existence. . . . It is palpably impossible that we can be conscious of an act without being conscious of the object to which that act is relative." But this latter reasoning, so firmly relied upon by Sir W. Hamilton, has been shown‡ by Mr. John Stuart Mill to be in reality utterly fallacious. He says, "If it be true that 'an act of knowledge' exists, and is what it is 'only by relation to its object,' this must be equally true of an act

* Lectures I., p. 288.

† Philos. of Perception.

‡ Examination of Sir Wm. Hamilton's Philosophy, pp. 120—125.

of belief; and it must be as ‘manifest’ of the one act as of the other, ‘that it can be known only through the object to which it is correlative.’ Therefore past events, distant objects, and the Absolute, inasmuch as they are believed, are as much objects of immediate knowledge as things finite and present: since they are presupposed and implicitly contained in the mental fact of belief, exactly as a present object is contained in the mental fact of perception.” Thus, by applying the same theory to belief and the objects of our belief, we the more easily comprehend the full extent of the weakness of Sir W. Hamilton’s theory: so that if we can be conscious of an operation without being conscious of its object, it no longer follows as a certainty that we *must* be conscious, in the way that Sir W. Hamilton supposes, of an external object in every real act of perception. And, notwithstanding his positive and reiterated statements concerning the nature of the facts of Perception revealed in Consciousness, it must be evident to all candid enquirers that his declaration of our having an immediate knowledge or Consciousness of the *non-ego*, is a sheer assumption, and one which begs the whole question in dispute as to the proof of the existence or non-existence of material objects.

Nothing can prevent me or any other physiologist from affirming with equal positiveness, and seemingly with more than equal plausibility, that inasmuch as, and just as, all states of feeling or Consciousness are functional products of molecular change in cerebral nerve tissue, so in the state of knowledge with its accompanying Consciousness constituting any given perceptive act, the Consciousness is not a separate and independent entity, but rather an appanage or attribute of this very state of knowledge itself, resulting from the functional activity of certain definite nerve elements. This conscious state itself, therefore, seems all that it is possible for us to know, either at the time or by any subsequent introspection. But as the very existence of this state is attributable to, or is the product of, certain functional and molecular nerve changes (which can only be regarded as *symbols* related to the external possibilities), how can we ever hope to know anything even of these nerve changes themselves which have given origin to the conscious state? And is there not still less chance or probability that this conscious state should tell us aught as to the absolute existence of the Thing without which is presumed to produce the molecular movements in our nervous system, when it fails to give us

any information as to the nature of the molecular changes themselves?

Thus Sir W. Hamilton's criticisms of Stewart's views concerning Consciousness lose much of their force and weight—so much so, in fact, that in all other respects, except in regard to Stewart's *Classification*, we believe his theory will be found more in accordance with the truth than that of Sir W. Hamilton. We can more easily account for various mental phenomena if we adopt Stewart's hypothesis, that Consciousness is a distinct faculty, or, as we prefer to express it, the function of a distinct organ. We have shown, indeed, that in some of his illustrations, and also, moreover, in his definition of Consciousness, Sir W. Hamilton has used language (although he apparently did not perceive it himself) which tacitly implied some such hypothesis*; and then we find him also explicitly stating his belief in the existence of "Unconscious mental modifications," notwithstanding his numerous other contradictory statements to the effect that "Consciousness comprehended every cognitive act." Whilst Stewart (who might have believed in such "Unconscious mental modifications" much more consistently) did his best to explain the facts and difficulties in question by reference to what have been termed the Laws of Obliviscence.

Why Sir Wm. Hamilton was so frequently compelled to use language contradictory to his own theory, will be better understood if we state in physiological terms the nature of the difference between the rival doctrines of Consciousness, since this then becomes more obvious, whilst at the same time other questions of the greatest interest also arise. The doctrine that Consciousness is the fundamental condition of all knowledge, that it is inseparable from every feeling or mental state, since it is but "the mental modes or movements themselves rising above a certain degree of intensity," could only be realised in a physiological sense, if we supposed the Consciousness and the knowledge (these being only different aspects of one and the same thing) to be evolved by the molecular action taking place in a single set of nerve elements; whilst Stewart's doctrine would seem better represented by the supposition that the

* He is contradicting his other statements, for instance, when he represents that his attention or Consciousness may be directed more especially to the "object known" in an act of knowledge; thus making this so-called "object known" (a mere unconscious nerve action) something different from the Consciousness to which it is revealed, as to an observer; when he had previously said that Consciousness was not "to be considered even as an observer—the mental modes as phenomena observed."

existence of a conscious mental act or state depends upon the operation of two distinct nerve centres, or sets of nerve elements ; the molecular action in the one set sufficing to produce the particular mental mode, so far as it can exist minus the accompaniment of Consciousness (or the *potential knowledge* as we shall term it), whilst the almost simultaneous molecular action in the nerve elements of the other gives rise to the phenomena of Consciousness. This conjoint operation of two such centres would, in Stewart's view, be necessary for the production of any mental mode, since those modes of nerve action only are called "mental," which are conscious modes. The limits of Consciousness were, in fact, generally held to be the limits of mind, and to talk, therefore, of "Unconscious mental modifications," as Sir W. Hamilton did, was, strictly speaking, a contradiction in terms.

But with the aid of this physiological illustration it will now become more obvious what is the precise difference in opinion on this head, between Stewart and Sir W. Hamilton. In addition to the fact that the phrase itself was suicidal, Stewart would have objected to it because he did not believe in what are termed "Unconscious mental modifications." He did not believe that the organic centres for any mental acts (comparable to those in which what we have termed potential knowledge may be evolved) were ever excited without the simultaneous activity of the organic centre of Consciousness —the conjoint and never separate, rather than necessarily inseparable, action of the two centres giving rise to the conscious mental act. Sir W. Hamilton, however, when he advocated the doctrine that "Unconscious mental modifications" did exist, though he used a self-contradictory phrase, and though he then deserted his own previous position, and announced a theory which was only really* compatible with the doctrine of Stewart, seemed to say, simply, that one of the two centres which Stewart presumes to be called into simultaneous activity may on certain occasions act alone, so that in each case there is wanting the element of Consciousness, this only causing the result to differ from otherwise similar mental states.

* For we do not think that, in the present state of our knowledge, we are warranted in believing that the presence or absence of Consciousness with the activity of certain nerve centres is dependent only upon the degree of intensity of action occurring in these centres alone, or upon the duration of their activity, though Sir W. Hamilton and others seem to intimate that it may depend upon some such cause.

These are the physiological issues to which the questions may be reduced, and there cannot be a doubt as regards the last of them, that a vast number of nerve actions do go on of an intellectual character, which are never accompanied by Consciousness. We may know and be conscious of the first term of a complex intellectual operation, and we may know the last, whilst all the intermediate stages may be a blank to us. Take, for instance, the phenomena of voluntary recall or *recollection* of a name or word at the time forgotten. We are conscious only of an effort and of an inward groping, but we really know nothing of the manifold molecular actions taking place in the organic seats of old associated ideas, until there suddenly starts to our lips and to our Consciousness, from the unknown depths, the missing word.* And yet it must have been by action and inter-action taking place from seat to seat of past impressions, according to a principle of association (dependent upon actual organization), similar to what occurs consciously at other times, that a molecular movement was at last aroused in the appropriate units, and that the name was then flashed into Consciousness. Since these operations are not conscious operations, they are not entitled to the name ‘mental’ so long as this word retains its present signification. There cannot be a question, however, as to the frequency and importance of such nerve actions of which we are unconscious in feeding and supplementing the nerve actions which produce our conscious states, and the conscious Mind characterising any individual is the joint product of both modes of activity—of our

* On this subject Dr. Carpenter makes the following interesting remarks :—“When we have been trying to recollect some name, phrase, occurrence, &c., and after vainly endeavouring all the expedients we can think of for bringing the desiderated idea to our minds, have abandoned the attempt as useless, it will often occur spontaneously a little while afterwards, suddenly flashing (as it were) before the consciousness ; and this, although the mind has been engrossed in the meantime by some entirely different subject of contemplation, and cannot detect any link of association whereby the result has been obtained, notwithstanding that the whole train of thought which has passed through the mind in the interval may be most distinctly remembered. Now it is difficult, if not impossible, to account for this fact upon any other supposition than that a certain train of action has been set going in the cerebrum by the voluntary exertion which we at first made ; and that this train continues in movement after our attention has been fixed upon some other object of thought, so that it goes on to the evolution of its result, not only without any continued exertion on our own parts, but also without our consciousness of any continued activity.”—*Human Physiology*, 1855, 5th Ed., p. 608.

"*Unconscious Cerebration*," as it has been termed by Dr. Carpenter, as well as of our conscious acts and states.*

Besides the "Unconscious mental modifications" of which we have been speaking, Sir Wm. Hamilton refers to two other kinds, or degrees, of "mental latency." In the first category he places all the knowledge that we may possess, which, not being present at any given moment, is nevertheless at any time recoverable by an act of voluntary memory or recollection. Whilst, "The second degree of latency exists when the mind contains systems of knowledge, or certain habits of action, which it is wholly unconscious of possessing in its ordinary state, but which are revealed to consciousness in certain extraordinary exaltations of its powers. The evidence on this point shows that the mind frequently contains whole systems of knowledge which, though in our normal state they have faded into absolute oblivion, may, in certain abnormal states, as madness, febrile delirium, somnambulism, catalepsy, &c., flash out into luminous consciousness, and even throw into the shade of unconsciousness those other systems by which they had for a long period been eclipsed and even extinguished."† All intermediate degrees of recoverability, in reality, are to be met with between these extremes; but, as Mr. John Stuart Mill says, in all these cases it is not, "the mental impressions that are latent, but the power of reproducing them"—the power which we retain of re-inducing molecular nerve actions of certain kinds in definite parts of the brain.

It is the third form of mental latency, however, which is best entitled to the name—that of which we have previously been speaking, and such as occurs when "one idea *mediately* suggests another into consciousness—the suggestion passing through one or more ideas which do not themselves rise with consciousness." This is obviously what Dr. Carpenter means and has so fully illustrated under the name of "*Unconscious Cerebration*"; and we are most glad to find Mr. John Stuart Mill saying‡—"I am myself inclined to agree with Sir W. Hamilton, and to admit his unconscious mental modifications, in the only shape in which I can attach any very distinct meaning to them—namely, unconscious modi-

* This view has been ably and forcibly advocated in the opening chapter of Dr. Maudsley's *Physiology and Pathology of Mind*.

† Lectures, vol. i., pp. 339—346.

‡ Exam. of Sir W. Hamilton's Philosophy, 1865, p. 285.

fication of the nerves. . . . In the case, for instance of a soldier who receives a wound in battle, but in the excitement of the moment is not aware of the fact, it is difficult not to believe that if the wound had been accompanied by the usual sensation, so vivid a feeling would have forced itself to be attended to and to be remembered. . . . In like manner, if we admit (what physiology is rendering more and more probable), that our mental feelings, as well as our sensations, have for their physical antecedents particular states of the nerves; it may well be believed that the apparently suppressed links in a chain of association, those which Sir W. Hamilton considers as latent, really are so; that they are not even momentarily felt; *the chain of causation being continued only physically by one organic state of the nerves succeeding another so rapidly that the state of mental consciousness appropriate to each is not produced.*" This we cannot but regard as a most important admission, and it will, we hope, tend to justify us in the eyes of many for speaking of feeling and Consciousness so freely from a physiological point of view in terms of nervous action. Though, if any still doubt as to the legitimacy of so doing, we would strongly recommend them to read the physiological exposition with which Mr. Herbert Spencer has thought it necessary to commence his *Principles of Psychology*, and which he concludes by saying* :—" Thus, impossible as it is to get immediate proof that feeling and nervous action are the inner and outer faces of the same change, yet *the hypothesis that they are so harmonizes with all the observed facts.*"

So farthen, we have met with no really contradictory opinions as to the nature of that which is termed Consciousness—all have meant by it 'self-consciousness,' a condition which, if not the very same thing, is, at least, the fundamental component of that mode of mind known as Attention. A 'Sensation' also has been understood to mean one form of such Self-Consciousness. But two writers of great influence in this country—Professor Bain and Mr. G. H. Lewes—have given expression to views different in some respects from those to which we have hitherto referred, and therefore to views which require consideration in this place.

In the last edition of his *Senses and Intellect*, Prof. Bain has endeavoured to alter the acceptation of the term Consciousness. And as we think we shall thus best represent

* System of Philosophy. No. 21, p. 128. (Oct. 1868).

his views, we will quote the following passages* :—“ I have also departed from the use of the word ‘ Consciousness’ employed in the first edition as another synonym for feeling. . . . I now prefer to give the word a greater extension than mind proper, and make use of it to include our object states as well as our subject states. The object and subject are both parts of our being, as I conceive, and hence we have a *subject-consciousness*, which is, in a special sense, mind (the scope of mental science), and an *object-consciousness*, in which all other sentient beings participate, and which gives us the extended and material universe. Such a mode of employing the term I consider as highly serviceable in dealing with the great problem of Metaphysics.” This state of *object-consciousness* is, however, limited to the discrimination of the degree of energy expended during muscular activity of any kind, and Mr. Bain says :*—“ In this state we usually cease to attend to the feeling as feeling proper ; we are rather occupied with the purely intellectual functions of discrimination and agreement ; we think of the present expenditure as greater or less than some other expenditure, or as agreeing with some previously known instances. This is to be intellectually engrossed, and under such an engrossment in the case of muscular exercise we assume the *object* attitude [of consciousness] ; we are not self-conscious, but are engaged in knowing certain purely object facts called force, extension, &c.”

Now, these statements of Prof. Bain are equivalent to a deliberate assertion that Consciousness (in its ordinary acceptance of self-consciousness) and Knowledge can be separated ; that a person can ‘ know ’ without being ‘ self-conscious.’ This, as we have seen, is what Reid, Stewart, Mr. James Mill, Sir Wm. Hamilton, and many other philosophers strenuously deny ; still, of course, it is quite open to Prof. Bain to doubt the validity of their conclusions. He seems inclined to maintain that the state of Consciousness involved in a mere act of intellectual discrimination—which is an altogether neutral state as regards pleasure or pain—is separated by the greatest possible interval from that other mode in which we experience some simple pleasurable or painful sensation. Such a position seems intelligible enough, and if it had led to the conclusion that a mode of Consciousness named Intellectual ought to be distinguished from Self-Con-

* Senses and Intellect, 3rd Ed. Appendix, p. 669.

† Idem, p. 83.

sciousness, which is more especially related to our Emotional states, there would, at least, have been a logical consistency in such a deduction, however much the desirability of marking this difference by distinct names might have been open to question. But although Prof. Bain separates his so-called *object-consciousness* from his *subject-consciousness*, on the general ground that when in the former condition "we usually cease to attend to the feeling as feeling proper; we are rather occupied with the purely intellectual functions of discrimination and agreement," we find, nevertheless, that this state of *object-consciousness* has only reference to one particular kind of intellectual engrossment—to that which occurs when we are engaged in discriminating amounts of muscular energy expended. Under what mode of Consciousness we are when engaged in other kinds of discrimination, or purely intellectual activity, Prof. Bain does not tell us: at least, he proposes a division of Consciousness into two modes—tacitly giving us to understand that in so doing he had compassed the whole sphere of Consciousness—and then we discover that he has either made a most arbitrary division, or else that he has altogether left out of consideration and nameless, a third mode of Consciousness which ought to be almost as distinct from his subject-consciousness as he deems his so-called object-consciousness to be.

If it be asked why Prof. Bain has picked out this one kind of activity from all other kinds of intellectual discrimination (which, in accordance with his own general reasoning, would be equally entitled to be distinguished by a separate name from the self-conscious or *subject-attitude* of mind), some sort of answer, it is true, can be given—but an answer accounting only for the reason which induced Prof. Bain to make a distinction between such discrimination of degrees of muscular energy expended and all other discriminations; though it gives no account whatever of the reason why he did not range all these other intellectual acts under some third mode of Consciousness: the explanation of this last apparent inconsistency remains undiscoverable. The discrimination of the degrees and modes of muscular energy expended is deemed worthy to be ranged under a separate mode of Consciousness, because Prof. Bain thinks that in this sense of energy exerted there is constituted "a something in vital contrast to all the rest of our mental experiences." But we believe Prof. Bain altogether over-rates the degree of contrast

between our sensations resulting from muscular activity and our other more passive states of sentiency ; and we have elsewhere* attempted to show that great as the difference may be, very much of the physiological and pathological evidence obtainable is opposed to the notion that any *such* fundamental distinction can be drawn as Prof. Bain has sought to establish. Wrought up with and organically related to all our sensory states there is so much of inference, that in an advanced stage of our mental life it is almost impossible for us to know how much of any given perception is due to inference, and how much would represent our rudimentary experiences from the same kind of impression. Thus, although the notions of "resistance" and of "force" which we have now acquired may seem to carry with them a speciality of their own ; although they may seem to give us a "something in vital contrast to all the rest of our mental experiences," we must not too hastily conclude that the impressions from which they have been derived are so fundamentally different from our other sensory impressions, till physiology and pathology have been probed to the utmost.

And, with regard to the general question, although when engaged in a pure act of intellectual discrimination, we do seem to be at the furthest remove from a state of simple feeling, either of pleasure or of pain, it must not be forgotten that these two modes of Consciousness are simply representatives of the first and last terms of a series, between which lie an infinite number of transition states. Any sensation, even the simplest, cannot exist as a mode of Consciousness without an intellectual element of discrimination ; and there are numberless states presenting the most insensible gradations between this comparatively simple state of feeling and an altogether neutral act of intellectual discrimination.† But whether we are experiencing one of these simple states of feeling or are engaged in an intellectual discrimination, we may be equally removed from another attitude of mind for which, perhaps, the term 'Self-Consciousness' ought to be more especially reserved. This is a condition in which the notion of an *ego* makes its appearance—in which we become conscious that this *ego* is affected in such and such ways, owing to the present impression blending with a number of wholly or partially revived memories of the past

* On the 'Muscular Sense,' and on the Physiology of Thinking.—*Brit. Med. Jnl.*, May, 1869.

See article on "Sensation and Perception" in "Nature," Dec., 1869.

to a sufficient extent to revive an idea of personality. To be self-conscious to the fullest extent, in this sense of the word, it is necessary that the attention should not be deeply engrossed either by any simple state of feeling or by any mere work of discrimination. Just as these latter conditions of mind meet in, or diverge from, one common state in which intellect and feeling of pleasure or pain exist in equal proportions, so do we find that these states, variously compounded out of discrimination and mere feeling, may be accompanied more or less by the self-conscious attitude of mind pure and simple. We are most self-conscious when the light of Consciousness is diffused over many more or less completely realised memories of the past, whilst we are at the same time percipient of not too vivid present impressions; and we are least self-conscious when our attention is most concentrated upon any one present feeling or act of discrimination—entire engrossment in either of these ways would remove us equally from this third mode of Consciousness of which we are speaking. All these, however, are differences of degree rather than differences of kind.

These different states seem, in reality, to be different modes of Mind (unconscious) rising into the light of a Consciousness which is one and indivisible. But this distinction between the mental modes with which Consciousness is concerned at different times, to which Prof. Bain more particularly has called our attention, is one which it is important to remember, and, at the same time, to understand correctly. It is the mental modes that differ, whilst the Consciousness, though differently directed, remains the same. We can easily comprehend that the discriminative mode is very different from the emotional mode of conscious Mind, and that both are different from the more peculiarly self-conscious attitude of Mind; though we cannot see the advisability of attempting to divide the sphere of Consciousness, as Prof. Bain has done, into an *object-consciousness* and a *subject-consciousness*. We cannot regard this as a strictly psychological division; it is one principally devised for the settlement of a metaphysical problem—and yet one which, as we believe, metaphysicians would not care to recognize. Metaphysically speaking, Prof. Bain has no right to assume the existence of other sentiences who are to hold with him an *object-consciousness* in common; and in a psychological point of view we believe such a conscious state, pure and simple, to have no real existence. As a consequence of this latter difficulty, which Prof. Bain

is himself almost obliged to admit (*loc. cit.*, pp. 382, 383), his use of the term becomes most vacillating. He sets out with the notion that we are in the object-attitude of Consciousness only when we are engaged in discriminating degrees and kinds of muscular energy expended; and he ends by apparently applying this term to any act of external perception,*—simply because a certain amount of muscularity may have been consciously involved, though in spite of the other modes of mental activity mixed up with this discrimination of resistance. And then, finally, we become almost hopelessly mystified when we find Prof. Bain saying in an *Appendix* (p. 682):—“My object-consciousness is as much a part of my being as my subject-consciousness is. Only when I am gone, other beings will sustain and keep alive the object part of my consciousness whilst the subject part is in abeyance.” Is this intended to be a psychological doctrine, or is it a statement appertaining to pure metaphysics? We must confess we find it quite incomprehensible under either aspect.

In his “Physiology of Common Life,” Mr. Lewes has furnished us with a most admirable and original view of the physiology of the Nervous System, in the justness of which we, for the most part, thoroughly agree. He has taken this occasion, however, for making a vigorous attack against the ordinarily received meanings of the words ‘Sensation’

* In order more clearly to point out what are the exact respects in which Prof. Bain's view differs from our own, we cannot refrain from quoting this additional passage. He says (*loc. cit.*, p. 376):—“In Sensation we seem to have the sentient mind, and the thing felt—*sentiens* and *sensum*. Some account must be rendered of this twofold nature of sense and knowledge. If the something that knows, feels, perceives, be called Mind, what is the other something that is known, felt, perceived?” This other something, in an act of perception, Prof. Bain believes to be *object-consciousness*, or the external world in the only sense which it can exist for us.

As the reader will perceive, however, more fully presently, our interpretation of Sensation is quite different. We believe that *sentiens* corresponds with Consciousness rather than with Mind; and that *sensum* can only be a mere unconscious cerebral nerve action—in this sense only should we be able to recognize the existence of an External World, even under its modified guise of an *object-consciousness*. States of Consciousness are our all in all; and the difference between what Mr. Herbert Spencer calls *centrally initiated* and *peripherally-initiated* feelings is quite capable of being explained physiologically. But as for an *object-consciousness* “in which all other sentient beings participate,” we must confess we cannot understand it. If it is the discrimination of ‘resistance’ to muscular energy, surely this discrimination is as much an affection of our own Sentiency or Consciousness, as the most passive appreciation of an odour would be; whilst if it is really something beyond the pale of Consciousness (subject-consciousness of Bain), then with us it could be nothing but a mere nerve action, such as we have termed unconscious.

and ‘Consciousness,’ and on this head we can neither agree with him as to the necessity, nor as to the advisability of making the changes which he proposes. His fundamental position is:—“That Sensibility is the *property inherent in ganglionic tissue*—the one peculiar ‘force’ belonging to all nerve centres, as neurility belongs to all nerves.” Then, out of the various meanings which, he says, have been ascribed to the word Consciousness, Sensation is the most essential attribute, that which is most generally implied, and which he elects as a representative of the meaning of the word in his own pages. Therefore Sensation and Consciousness (meaning almost the same thing, or, at all events, always going together) are the functions not of any one particular part of the brain, but rather the property of ganglionic tissue generally, wherever it may exist, throughout the whole Nervous System. Thus what most people would term a mere *impression*—an unconscious nerve action—Mr. Lewes says should be named a Sensation; and just as the molecular changes in the ganglionic cell are said to produce a Sensation, so Consciousness is said also to be an attribute of this mere molecular change, whether it takes place in the spinal cord, or in any other nerve centre whose molecular actions alone are quite incapable of arousing the attention of the individual. The one word ‘Perception’ is used so as to include what most other writers mean by Sensation as well as Perception. And although the word Consciousness, as employed by Mr. Lewes, has scarcely any intelligible meaning, it seems evident that he understands by the word ‘Attention’ what other people mean when they speak of Consciousness.

These changes which Mr. Lewes wishes to bring about in the acceptance of such words as Sensation and Consciousness would, we think, tend in practice to create so much confusion, that only as a matter of dire necessity should such a modification be adopted. We are unable to go into Mr. Lewes’s reasonings in detail, though we think it would be quite possible to show that there is no logical inconsistency in retaining these words with their old meanings, whilst at the same time we fully appreciate the importance of the reasons which induced him to advocate the change. But we consider that all the principal improvements (leading to the clearing away of misconceptions concerning the mental phenomena of man and the lower animals) which Mr. Lewes is anxious to bring about, may be secured in a less costly manner and with-

out sacrificing the meaning of two words in such constant use—words whose implications are so deeply rooted in our thoughts. Let us rather begin the reform by enlarging our conception and definition of Mind. Let us openly profess that which has already been tacitly implied by many. Instead of supposing that Mind and Consciousness (in its ordinary acceptation) are co-extensive, let us make Mind include all unconscious nerve actions, as well as those which are attended by Consciousness, and then in accordance with Mr Lewes's* own views, the whole Nervous System would become the organ of Mind, and the brain only its chief seat. We must inevitably come to this: and the doctrine of "Unconscious Cerebration" has served to pave the way for it. In default of such a doctrine, as we have seen, both Sir W. Hamilton and Dugald Stewart were unable to define Consciousness without contradicting their own narrower conceptions of Mind.

Thus, although we cannot admit with Mr. Lewes that the "Nervous system has one general property—Consciousness," we do consider that it, as a whole, should be looked upon as the organ of Mind, whilst Consciousness should be regarded as a special function of some part or parts of the brain—the principal organ of mind. Thus we would change the meaning of one word instead of that of two. And the change proposed in the acceptation of this one word would, after all, not involve any such radical alteration of meaning as might at first sight be imagined. Mind is generally supposed to be constituted by our conscious states or nerve actions only; but as these conscious states are themselves only the last terms of a series of molecular actions taking place in ganglionic and other nerve tissue, we now simply maintain that the components and not the resultants alone ought to be considered as elements entering into the composition of Mind. And similarly we would make the sum total of the seats of these molecular changes—the whole Nervous System—rather than the seats of the resulting conscious states alone, constitute the organ of Mind as now understood. Unconscious mental modifications do undoubtedly exist—that is, real mental actions, which though they do not reveal themselves in Consciousness, seem to be in all other respects precisely similar to those which do so manifest themselves. And seeing that Mind,

* I o c. cit., vol. ii., p. 4.

even in its ordinary acceptation, is the product of all ‘potential’ as well as of all realised knowledge, the word cannot, without the intervention of a fundamental error, be considered as a convertible term for realised or realisable knowledge only. That which is realisable now, or capable of being recalled to Consciousness, may and often does after a time cease to be so—and yet the essential nerve actions themselves may still go on, may still noiselessly, though none the less surely, work their influence upon our fleeting succession of conscious states. Thus has it been with the race, thus is it with the individual. And shall we cease to call a given nerve action mental when by frequent repetition it has become so habitual that it no longer arouses Consciousness? If so we should retain the name for all that is new, uncertain, and vacillating, and should reject it for all that is old, invariable, and easy. As Mr. Herbert Spencer says* :—“Memory, Reason, Feeling, and Will simultaneously disappear in proportion as by their habitual recurrence any psychical changes become automatic;” so that “a new and still more complex order of experiences is thus rendered appreciable; the relations they present occupy the memory in place of the simpler ones; they become gradually organized, and like the previous ones, are succeeded by others more complex still.” Such are the transitions from Consciousness to Unconsciousness ever taking place in the evolution of Mind; and the more fully such phenomena are recognized as parts of an orderly succession by which alone greater and greater complexities of thought and feeling, are rendered possible, the more will it become evident that the sphere of Mind cannot at any time be circumscribed by the then present or possible states of Consciousness—the more it is obvious that in our conception of Mind we should also include all past stages of Consciousness which now in the form of unconscious nerve actions are, from moment to moment, manifesting themselves potentially, if not actually, in all our present thoughts, feelings, and volitions.

* *Principles of Psychology*, 1855, pp. 616 and 563.

The Cottage System of Management of Lunatics as practised in Scotland, with Suggestions for its Elaboration and Improvement. By J. B. TUKE, M.D. Edin., Medical Superintendent of the Fife and Kinross District Asylum.

(*Read at a Half-yearly Meeting of the Medico-Psychological Association, held at the Royal College of Physicians, Edinburgh, 25th November, 1869.*)

THE more general adoption of the "Cottage System" for the boarding out of harmless and incurable lunatics is regarded by many as the only remedy for the increased demand for Asylum accommodation, for the reduction of expenditure, and for the prevention of the overgrowth of Asylums. In Scotland the suggestion meets with the approbation of high authority—in England it does not. I have experienced no small reluctance in coming forward now to express my opinion of the working of the system as it now exists in Scotland, and to narrate my experience of it derived from actual inspection; but conceiving it to be a fair field for discussion, I enter upon it in the full hope that, however much my views may militate against the opinion of the advocates of the "Cottage System," they will be accepted as unbiased by aught but a desire to promote the welfare of the lunatic and the public at large.

It is needless here to enter upon comparisons between foreign institutions, such as Gheel, and the villages in Scotland in which patients are boarded on the "Cottage System," as there is no mutual stand-point of history or national characteristics; nor is animadversion called for on the failure in attempts to institute similar villages prior to the appointment of the General Board of Commissioners in Lunacy for Scotland. We must confine ourselves to the consideration of things as they at present exist.

In order to be able to form an individual opinion of the manner in which lunatics are provided for under this system I paid two visits to Kennoway, a village in Fifeshire, about a mile and a half distant from the Cameron Bridge Station on the Leven and East of Fife Railway. The first visitation was made on the 4th July, 1869, when I was accompanied by a member of the Fife and Kinross District Lunacy Board; the second on the 16th October, when Dr. John Smith, Vice-President of the Royal College of Physicians of Edinburgh, was my companion. As you all know Dr. Smith has been

closely connected with the treatment of Lunacy for the last half century, has made the management and accommodation of the insane his special study, and has been a thoughtful observer and carrier out of the improved system of treatment. It is of no small importance to be able to inform you that either he or I had been personally acquainted with all the patients resident in Kennoway (with one exception) when they had been inmates of Asylums. The larger number had been under Dr. Smith's care, either in the old City Bedlam or in the Lunatic Wards of the City Poorhouse of Edinburgh—the remainder had been patients of my own in the Royal Edinburgh Asylum or in the Fife and Kinross District Asylum.

The village of Kennoway is healthily situated on a rising ground overlooking the Firth of Forth, from which it is distant about two miles; in consequence of the decline of the hand-loom trade it has seen its best days; many of the houses are ruinous, and its general appearance is strongly suggestive of decay. Boarded in the houses of the villagers are from twenty-three to twenty-five lunatics, whose condition is admitted to be equal, if not superior, to that of the 1,500 similarly accommodated throughout Scotland.

The tenements in which we found the patients were of the class inhabited by the poorest of agricultural labourers and weavers, many were evidently damp and indifferently ventilated, the floors in most instances paved with flags, and open drains stood or ran before the doors. As a rule, the æsthetic term of "Cottage" as applied to these dwellings is an utter misnomer—to certain of them the term "hovel" would be more appropriate. In one the stair bore witness to the antiquity of the dwelling, being so worn by the feet of past generations as to require the visitor to make use of a rope for safety in ascending and descending. There are two or three exceptions to this dilapidated condition, but the very best houses are faulty in construction. As to cleanliness, one half of these dwellings were, considering all the disadvantages, very fairly attended to, the other half were open to considerable animadversion. One was filthy in the extreme.

The number of patients in any one house does not exceed four—these are termed "Special Licensed Houses;" in others one, two, or three lunatics are boarded. The rate of board paid to the guardians is six shillings per head per week for males, and five shillings for females—clothing being provided by the parish.

The patients were, with one exception, either demented whose disease was of long standing or congenital idiots. One woman was reported to be subject to paroxysms of excitement. Taken as a whole, they were identically of the class which forms the mass of Asylum population.

On the occasion of my first visit I found in one of the worst managed houses a girl whose melancholic insanity was of recent origin—a case which appeared to me curable. On my second visit I was given to understand that she had left the village, having proved too troublesome for her guardians to manage, who reported to me that the patient had gone away far worse than when she came.

Within the last few weeks a young woman has been transferred to my asylum who has been weak-minded from birth. She had, previous to admission, been resident in a private dwelling in the village of Star, near to Kennoway, in consequence of symptoms of hysterical insanity having developed themselves. It was found impossible to manage her on account of her erotic tendencies which at last gave rise to an outrage on public decency and which necessitated her transference to the Asylum.

I know nothing as to the authority by which these two patients had been detained in the parish of Kennoway, but they are evidences that the "Cottage System" is applied to recent and curable cases, as well as to harmless and incurable.

The general appearance of the patients as to cleanliness of person and clothes ranged between moderately clean and decidedly dirty. No means whatever exists for bathing. In no instance had a bath been administered since transmission to the village.

On the occasion of both my visits I had full opportunity of judging of the diet; as a rule it appeared to me insufficient in quality and quantity. It consisted chiefly of broth, fish, and potatoes; the vessel containing the broth was of a size not compatible with satiety; the fish and potatoes were with patriarchal simplicity conveyed to the mouth by the fingers. In one house, however, a good and sufficient meal, decently served, was laid before the patients.

The conclusion arrived at by Dr. Smith and myself after a careful consideration was, that all these patients had materially fallen off from the bodily condition in which they had been when inmates of the establishments over which we had control. Three who had been transferred from my own

Asylum only a few months previously were anaemic and thin compared with what they were when they left my charge.

The amount of supervision exercised over these patients and their guardians is understood to consist of a visit twice a year from a Deputy-Commissioner in Lunacy, a quarterly visit from the parochial surgeon, and an occasional visit from the Inspectors of Poor of the parishes to which the lunatics severally belong. The Inspector of Poor of Kennoway acts as honorary Superintendent, which office entails no small amount of trouble and correspondence.

Those houses in which the patients were best cared for were kept by aged or decrepit persons who were evidently unable from these or other incapacitating circumstances to follow out any definite employment; in fact, it appeared as if they were merely able to eke out their own existence from the meagre profit derivable from the board paid for the maintenance of their charges. I gladly admit that in the best houses the manner of the guardians was such as to lead to the conclusion that they took a kindly sort of interest in their patients, but I was by no means so struck with the style of others, none of whom would I have selected as an asylum attendant.

It cannot be said that any greater degree of contentment as to their lot existed amongst those lunatics than amongst those resident in asylums. Several regretted the absence of the amusements and variety of an asylum life and complained of the dullness and monotony of their present abode. One poor woman said that she was anxious to be back in the "Forrest Road,"* an institution not peculiarly characterized by variety, but still a very vortex of excitement compared with Kennoway. The complaints which are constantly heard in Asylums were not wanting here, and any appearance of really greater personal liberty was far from evident. As to absence of restraint and discipline as ameliorating conditions much cherished by these free air patients I am very doubtful; those who could think at all recognised the fact that they were still "kept" in Kennoway and that they were no more free than if detained under a Sheriff's warrant. I may be wrong, but my impression was, that the restraint and authority exercised over them by persons of their own or even of a lower class sat heavier upon them and was accompanied by a feeling of degradation greater than would have been experienced had they been exercised by those whom they recognised as their

* Lunatic wards of City Poorhouse, Edinburgh.

superiors. They all had their limits assigned them—some went stated messages and errands—others were allowed to bask in the sun in the streets or “kale yard,” but all were as much restrained as if within the boundary wall of an asylum estate.

If I had ever entertained any hypothetical sentiment about the “traitment à l’air libre,” it was utterly dissipated by my experience of Kennoway, for I can safely say that most of these patients would have had more free air, and of a better quality, and equal if not greater liberty in any well constructed and well regulated Asylum than they received in the position in which we found them. The day on which my first visit was made was fine and sunny and therefore the brightest side of the picture was seen, but what is the condition of these poor people in winter or in rainy or stormy weather? Which would you consider the more monotonous under such circumstances, the workroom or verandah of an Asylum, or the dingy kitchen of a Kennoway cottage? That all of these patients were in more “homelike” circumstances than if confined in an Asylum is most true: many of them were in the full possession of the homelike influences of dirt and squalor, and all of them were devoid of the unhomelike influences of personal cleanliness. But how far they were benefited by presence of the one and absence of the other is open to doubt.

In very fact we must put aside “free air,” “greater liberty,” and “absence of restraint,” as mere sentimental props—arguments which could only be used to influence the opinion of those unconversant with the peculiarities of the insane, quite impotent to convince those who have made them a study. I can honestly say that in my own asylum any one of these patients would have had greater liberty of action, less restraint, and better and freer air, and I am sure the same would obtain in any one of the institutions with which you are connected.

From all I could learn very slight attempts were made to employ these patients, although certain of them were quite capable of appreciating the advantages of such recreations.

A few attend public worship in the parish church, but I was given to understand that their presence was not agreeable to certain of the congregation. No evidence presented itself that these lunatics met with annoyance or irritation from the juvenile public—on the contrary, from all that could be gathered, a kindly and considerate feeling exists towards

them throughout the village. On subsequent enquiry I was informed that apprehensions are entertained by certain of the inhabitants of Kennoway as to the dangerous tendencies of one of these lunatics, that on the part of others a dislike exists to the constant presence of such depressing and melancholy objects, and that objections are held to male lunatics being boarded in the houses of single women, of which there are instances.

Having thus laid before you the general results of my inspections of the Kennoway patients, I am desirous of entering upon a comparison between their condition and that of lunatics resident in asylums and the lunatic wards of poorhouses. Perhaps it will be as well to take up the monetary part of the question first. The rate of board paid to the guardians is £15 12s. per annum for males and £13 for females. The expenditure for clothing (which is found by the parish) may be stated at £2 per head. The parochial surgeon is paid half-a-guinea per head for visiting, and an additional £1 for inspector's travelling expenses, correspondence—charges for transference and extras may be fairly added, giving a total of £19 2s. 6d. for males and £16 10s. 6d. for females, and a mean over the two sexes of £17 16s. 6d. In all future comparisons this average will be adopted as against the rates of board in asylums, where the charge is the same for men and women.

According to the Eleventh Annual Report of the General Board of Lunacy the average daily rate of maintenance in royal and district asylums, in 1867, was 1s. 4d. per head, amounting to £24 6s. 8d. for the year. Several asylums have reduced their rates of board since the date of the report, but we must accept this sum as the last officially reported. The outlay for building falls upon the county, still it must be reckoned amongst the items of maintenance. It may fairly be stated to be £4 per head per annum. The rate of maintenance in lunatic wards of poor-houses and parochial asylums is £19 15s. 5d. It will thus be seen that the charge for a lunatic under the "Cottage System" is £10 10s. 2d. less than that for the asylum patient, and £8 11s. 3d. less than that for the inmate of a parochial asylum.

The question now is, by what means is this saving obtained? It is self-evident that it is the result of inferior accommodation, inferior diet, absence of supervision, neglect of cleanliness, the non-provision of those ameliorating influences which in asylums are considered to be absolutely necessary, and the want of attention to those hygienic con-

ditions which are universally accepted and inculcated in hospitals for the insane.

It may be argued by the friends of the "Cottage System" that pauper lunatics are frequently derived from the lowest class of the lower classes, and that therefore there is no hardship in returning them to the abodes in which they were reared when a return to sanity is beyond hope. This is only partially true—as a large proportion of pauper lunatics is derived from the most respectable class of the lower orders; they are paupers only from misfortune, and their lives previous to the occurrence of insanity have been passed among comfortable surroundings and the elevating influences of well-regulated homes. If we look over the record of any pauper asylum and examine what their previous occupations have been, we find that the majority have occupied positions in the world very far above anything approaching the pauper. Artisans, domestic servants, ploughmen, and their wives and daughters form the great mass of the entries. The *bonâ fide* pauper is rarely represented, therefore it is not fair to regard the pauper lunatic in the same category with the ordinary pauper. Even if it were, are we to accept the habitation of the poorest of the poorer classes as a criterion for the accommodation of the harmless and hopeless lunatic? I have no hesitation in saying that in at least three of the houses which I visited at Kennoway, lunatic patients were accommodated in this manner, most of whom were not so demented as to be unable to recognise the benefits of a superior condition, and whose deterioration might be considered as certain in consequence. To say that what is good enough for a sane pauper is good enough for an insane is simply to ignore and cast overboard the results of the philanthropic efforts of the last forty years. If the houses I speak of are sufficient and satisfactory for the accommodation of certain of the cases I found in them, the construction of the various Asylums in Scotland was uncalled for and unnecessary by at least one half. If it is right and proper and humane to keep lunatics who can appreciate the real comforts of an asylum in such places as the worst houses in Kennoway, it would be right and proper and humane for medical superintendents to dismiss to similar quarters one half of their patients.

As to supervision, it is just possible that, speaking as a Medical Superintendent, I may overrate the disadvantages consequent upon imperfect supervision; but it does strike the medical superintendent mind as curious that if he, an educated

professional man, specially educated in a special branch of his profession, requires the manifold machinery of supervision to which by Act of Parliament he is subjected, the uneducated cottar should have consigned to his slightly supervised charge that helpless being, the chronic dement, who most requires careful consideration and protection. It argues simply this, that the machinery of Asylums is too complicated or that the supervision of the insane in private dwellings is proportionately inadequate. That personal cleanliness must be scrupulously attended to is a leading axiom in all Asylums. No means for bathing exist at Kennoway. I instance the highest authority in Scotland that it is imperatively necessary. In the Ninth Annual Report of the General Board of Lunacy will be found the following passage, which occurs when the Visiting Commissioner is commenting on the deficient water supply in the Royal Asylum, Aberdeen—"It is stated that, during the winter, each individual is bathed about once a month, and during summer more frequently, and the same water may be used by ten. This arrangement *seems altogether inadequate*; and if dictated by scarcity of water, a sufficient supply should be forthwith secured, as absolutely required for the purposes of mere cleanliness *as well as of health.*" * And in many other instances in this and other Reports similar comments are made by the Visiting Commissioners as to the deficient means for personal cleanliness in other Asylums, and in one instance the absence of paper in water-closets is animadverted on. With these opinions of the governing body before us, and with our knowledge of the customs of the insane, no one can gainsay the fact that a great desideratum in treatment is absent in Kennoway.

In Asylums the expense for diet is understated at 4s. 6d. per week. The scale laid down for the lunatic wards of Poor-houses cannot be acted up to for a less sum. The mean rate of board for males and females at Kennoway being 5s. 6d. per week, we may allow one shilling for bedding, washing, and house rent, one shilling for profit, leaving only 3s. 6d. per week for food. This sum can hardly be considered adequate, more especially when we take into consideration that in Asylums provisions are obtained by contract and as a rule at a lower rate than is paid by the public.

Superintendents experience great difficulty in obtaining proper persons to act as attendants on the insane. Even

* Appendix to the Ninth Annual Report of the General Board of Commissioners in Lunacy for Scotland. Page 148. The italics are my own.

under supervision, it takes months to train such a servant and to inculcate that consideration which is due to the weaknesses of those under his or her care. How, then, is it to be expected that the poor labourer or artisan can at once be fitted to undertake the office for which experience shows special training is absolutely necessary.

Enough has been already said as to my impressions of the system "à l'air libre," and the absence of contentment amongst the Kennoway patients. I would only direct your attention to the total want of all ameliorating and so-called humanising influences which are recommended by the governing body as necessary in Asylums. Amusements there were none, employment was scanty, ventilation was imperfect, and cheerful surroundings were entirely absent—a vegetable existence at 5s. 6d. per week was the lot of all I saw in the village.

We, as psychologists, admit fully the propriety and necessity of the recommendations of Commissioners so frequently urged for the provision in Asylums of amusement and objects of interest, and endeavour as far as lies in our power to carry them out, occasionally experiencing no small difficulty in convincing Boards of Management that such things as pictures, musical instruments, books, periodicals, lectures and concerts are necessary for the treatment of the insane. It has been put forward to me as an argument against them that 1,500 lunatics of the same class as forms the staple of Asylum population are resident in private dwellings, where no such means of recreation and amusement exist, and it was argued that if these 1,500 people could do without them, why should public money be expended for the residents in Asylums?

From all that has been said, I do not think it can be doubted but that the saving obtained by the Cottage System is procured by means detrimental to the lunatic. It is difficult to understand how this provision for lunatics can be held to be satisfactory when it is compared with Asylum accommodation.

Statistics show that the death-rate in private dwellings is much less than in lunatic wards of Poorhouses; but this can easily be accounted for by the fact that no one can be transferred to a "Cottage" unless certified to be in sound bodily health. It cannot be said that any lunatic is in sound bodily health, as the nervous centres are necessarily diseased and impaired to such an extent as to mask the symptoms of diseases of other organs—thus rendering constant medical supervision necessary. We have no means of

ascertaining what are the causes of death amongst "free-air" patients, but we know that the subject of epilepsy, general paralysis, phthisis, or heart-disease cannot be boarded out, and, therefore, this section of the insane is not liable to death from the four main causes of death in Asylums and Poorhouses. Any deduction, accordingly, from the relative death-rates must be fallacious. The low death-rate is the strongest argument put forward in favour of the system, but it seems to me quite untenable.

Having thus freely expressed my opinion of my experience of this so-called system, it may seem strange to you that I am in favour of employing it in certain cases and under certain conditions. Demand for increased asylum accommodation is made year by year, and, unless some steps are taken, district asylums must double their size within the next thirty years. These asylums are provided for the wants of special districts and have no power to refuse admission. If we allow that 50 per cent. of admissions are discharged cured, and 25 per cent. die, there is a residuum of 25 per cent. left to swell the population, so that a yearly increase is unavoidable. Many of you may disagree with me in considering large asylums national misfortunes, unbeneficial alike to the patient, the ratepayer, and the physician. However that may be, in an improved and elaborated Cottage System there appears to me to be a means of providing for harmless and incurable lunatics without any detriment to them. What is needed is *superior supervision, increased rate of board, and a higher class of guardians*—in short, that the inmates of private dwellings should be subjected to conditions more closely allied to those of inmates of asylums. To this end I suggest that all lunatics of a district should be placed under the control of the District board, that such patients as are suited for residence in private dwellings should be located in villages as nearly adjacent to the asylum as possible, and that the medical officer or officers of the asylum should make regular visitations, as often as the board may direct, and report the result. The guardians should be approved of by either a deputy-commissioner or the medical superintendent of the district asylum, and their houses should be made liable to visitation at any hour of the day or night by the latter officer, in the same manner as lunatic asylums are liable to the visitation of the Commissioners in Lunacy.

It may be said that this is constituting the medical superintendent the district inspector. Why should it not be so?

The inspection of the asylum over which he has charge is already sufficiently provided for, and I think it will be admitted that as a rule no better judge could be found of the proper treatment of lunatics in private dwellings than a man experienced in the management of lunatics in asylums.

A diet scale, the same as that laid down for the lunatic wards of poorhouses, should be made imperative for cottage patients, and rules be established for the maintenance of personal cleanliness. No houses should be licensed except such as are in good repair and inhabited by the better class of the peasantry or small artisans. These improved conditions would necessitate an increased rate of board, falling not far short of what is paid for patients in asylums ; but without it it is hopeless, in my opinion, to obtain any satisfactory working of the Cottage System. Its success, economically, must not be dependent on the poverty of decrepit old men or women with whom responsibility cannot be made to lie. Suppose a case :—A guardian from some unforeseen accident incurs a petty debt ; how is it to be paid except by withholding from the lunatic consigned to his or her charge as much of the aliment provided as may wipe out the score ? Again, how much temptation lies in their way to conceal circumstances connected with their charge which might result in removal to an asylum, taking away with him the pittance which alone stands between the guardian and the poorhouse. By making the system pay there is little doubt but that people would be found competent to undertake the duty, derived from a better class who could be held actually responsible for the well-being of the lunatics and whom constant supervision would educate into a thorough knowledge of their business.

The class of patients suitable for the treatment is limited. Certainly young women are not eligible. Dements who, after a fair trial, have been found insusceptible of improvement by discipline and asylum treatment, and the better class of congenital idiots should be alone consigned to the cottage.

I understand that Dr. Arthur Mitchell, Deputy-Commissioner in Lunacy for Scotland, considers 10 per cent. only of the inmates of asylums are fitted for cottage treatment as it at present exists. It appears to me that a larger proportion might be so provided for were the suggestions I propose adopted.

There is yet another class of patients who might be consigned to cottages, namely, those discharged "on probation." Asylum authorities are to some extent responsible for patients

on trial, as their names are not taken off the books till the period of probation has expired. It appears to me that it would be only fair that such patients should remain under the cognizance of superintendents as long as they are in any way responsible for them.

I am well aware that many minor difficulties would arise in the organising of a system such as is now proposed; but they will be small in comparison with the advantages to be derived in overcoming them. These advantages consist in:—

1st.—Keeping down the growth of asylums, of which the “inevitable addition” would not be necessary every ten years.

2nd.—A *real system* of supervision and management over lunatics in private dwellings would be established.

3rd.—The public would be guaranteed the proper care of *all* their pauper lunatics by their transference to the care of the District Board.

4th.—A large proportion of lunatics would be provided for by the Cottage System, if superintendents could assure themselves of the proper treatment of patients under such circumstances.

5th.—The system might be made available for the treatment of convalescent cases. I know of many instances within the last few months, which would have been benefitted by a change from the discipline of the Asylum, could I only have assured myself by personal observation of their proper treatment during their term of convalescence.

The Cottage System must sooner or later be brought more fully into play, but it will never gain the confidence of the general public, or of those physicians who have made insanity their special study, until more stringent provisions against abuse are instituted, and greater assurances are offered that patients so provided for are looked after in a manner more nearly approaching to those confined in asylums. By its elaboration all necessity for enlargement of existing asylums would be obviated for many years to come. The machinery for carrying out the plan I have suggested already exists—and, were it adopted, it would secure a reduction of the enormous expenses to which districts are liable for the provision and maintenance of asylum accommodation.

Feigned Insanity; with Cases. By DAVID NICOLSON, M.B.
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WHEN we find, as recorded in the book of Samuel, that the great Psalmist resorted to imposture and "feigned himself mad and scrabbled on the doors of the gate, and let his spittle fall down upon his beard ;" we cannot be surprised if minds less gifted should, for whatever purpose, assume the character of a madman. The beautiful conceptions of Shakespeare unfold to us in its highest fulness the rôle to be sustained by the player who is "but mad in craft." We are told how Hamlet :—

Repulsed,
Fell into a sadness; then into a fast;
Thence to a watch; thence into a weakness;
Thence to a lightness, and by this declension,
Into the madness wherein now he raves,
And all we mourn for,

and how Edgar, amid all his witless jabbering, himself exclaims aside :—

My tears begin to take his part so much, they'll mar my counterfeiting.

Here we have, first, a truthful picture of the approach of insanity ; and secondly, a happy instance of the struggle of the better emotions, which have to be subdued to make way for the objective manifestations of the simulator. The admirable delineations of Feigned Insanity given by our great dramatist, must have been conceived upon the basis of true madness, and with a view to plot-interest rather than to the contradistinction of the real from the simulated. He portrays the latter in its most complete form,—viz., where the semblance is mistaken for the reality ; where, if I may be pardoned the paradox, madness is in reality simulated. But that it should be so, intellectual ability, histrionic talent, education and worldly experience must be brought to bear upon it ; for does not Polonius say of Hamlet maintaining the deception, "How pregnant sometimes his replies are ! a happiness that often madness hits on, which reason and sanity could not so prosperously be delivered of."

It is the talking of gibberish, unconnected indeed, but not always devoid of meaning or point, which taxes the powers of the simulator in such circumstances, and which is sure to betray him if dull and unlearned. He starts well perhaps, rambling and incoherent, but he cannot sustain it; he fears repetition, for he might make a suspicious failure even in that; his tongue falls short of words, so that he must either change the character of his case or give it up altogether.

This high form of feigning, where an intelligent being seeks, not improbably with good ulterior motive, to appear insane amid the ordinary relationships of life, will seldom be attempted. The difficult part must be well played, else failure and discomfiture are certain. The task that I have proposed for myself deals not with the high-born Hamlet and Edgar or with the sage Ulysses.

Solon and the aesthetic David feigned insanity at one end of the social pole: our prisoners, whether at the bar or in the convict garb, do the same at the other. The motive, the form assumed, the skill exhibited, the success attained, may be different at the two extremes or in any two cases; but in all, the manifestations are of a psychological nature. We have at work the minds of two individuals, the actor and the on-looker, and we have also a third set of mental manifestations, which, given out by the one, and scanned by the other, may be said to be foreign to both. In this mixture of phenomena, and in the natural complexity and indefinite character of the human mind in its sound and unsound conditions, lies the difficulty at once of the impostor and of the observer. The impostor, conscious of his own duplicity or doublemindedness, and watchful of the effects of his scheme, has doubtless a difficult part to play, but possesses at the same time an advantage in proportion as he knows his part and can act it well. The observer, suspicious it may be of appearances well kept up, is conscious of the elasticity and delicacy of the boundary line between sanity and insanity; he feels perhaps the responsibility of a decision lying with him, and while a doubt remains unsatisfied, or a test unapplied, he wisely avoids committing himself, and his temporary defeat, if it can be called so, is a most pardonable one.

The observing mind, when suspicions arise as to the actual state of the apparently mad, asks if there is any motive for imposture, and is thus carried beyond the external manifestations to search out the workings of a possible sane and prompting mind behind the scenes. To reap the benefit of

this hypothetical inquiry, the external relationships of the individual and his probable course of action under certain circumstances have to be ascertained, at least approximately ; and to this end psychologists have some general estimate of a sane mind, and its modes of action under external influences. "We are enabled," says Dr. Maudsley,* "by virtue of the general laws of association (of ideas) in which all men agree, to predict the general course of human conduct, and to establish laws for the regulation of the social state. Within these general principles, however, there are numerous subordinate differences ; the special character of an individual's association of ideas being determined partly by his original nature, and partly by his special life experience." And again (p. 124), "when it is said that a man's character is completely formed, we express thereby the fact that he has acquired certain definite combinations and associations of ideas which, firmly organized, henceforth avail him in the different relations of life. It is evident, then, that if we had a complete knowledge of the inner nature of an individual, if we could penetrate that most exquisitely organized fabric of thought, which by reason of his particular life-experience has been grafted on the original capabilities, it would be possible to foretell with certainty his mode of thought and conduct under any given circumstances—a prediction which, as it is, those who know a man best often fail not to make, with close approximation to truth."

It is through this general estimate of a man's probable action with reference to his surroundings, that we proceed to the classification of individuals, according to their type of mental organization. This classification varies of course with the grounds upon which it is made. That with which I deal at present results from the formation, in the course of human progress, of civilized communities, and has more especially the moral faculties for its basis. Society demands as the very essence of its existence an adherence to its established rules on the part of its members ; and being self-regulative, it takes upon itself, with a view to its own preservation, the task and onus of detecting and punishing those whose conduct and actions are in opposition thereto. It expels repeated and notorious offenders, who by their own acts have forfeited their claim to its membership. This social expurgation gives rise to an important subdivision of the moral aspect at least of mind, as evidenced by the outward

behaviour. The class, eminently and distinctly criminal, thus formed, must no doubt be looked upon as affording evidence of some inherent difference from those who do not belong to it. The criminal must be distinguished from the non-criminal, and little investigation is required to show that this difference is due, not merely to the influence of external circumstances, but also to the mode in which the minds in question receive impressions from without, and to the particular character of those minds themselves. Morally, the criminal has much the same relation to the non-criminal, as intellectually (and generally) the imbecile or the demented has to the sane; not merely in the sense of the one occupying a position which the other does not, but in so far as the type of mind and its manifestations are different essentially. I speak, be it remembered, of those peculiarly and habitually criminal. It is now well established that a moral sense congenitally defective, or destroyed during a life-experience, may co-exist with an intelligence of at least average capacity. "It will not be denied," says Ray, * "that the propensities and sentiments are also integral portions of our mental constitution, and no enlightened physiologist can doubt that their manifestations are dependent on the cerebral organism." This being so, we cannot avoid the conclusion that the manifestations are alike liable with the organism to derangement and to disease. That a man may be morally insane, with intellect unimpaired, is a position that may now fairly be assumed to be without question. The existence of a moral obliquity and a moral depravity leading to the commission of extravagant or vicious acts is self-evident; but that they should ever so exist as to constitute of themselves a recognized form of insanity, and therefore of irresponsibility, was a thesis requiring proof and demonstration. Legal authorities especially were, and are, unwilling to give up their dogma that illusion or hallucination is necessary to the existence of insanity, and hence the question that often arises, not merely between doctors and lawyers, but in the minds of doctors themselves:—Is the individual who commits a particular act of violence a criminal, or is he morally insane? I cannot enter into it here, but the question is a very interesting one, its importance is daily becoming more apparent, and the results of its study more real. They are alike, the criminal and the morally insane, in so far as their behaviour is utterly at variance with the social standard—obligatory morality as well

* *Jurisprudence of Insanity*, p. 163.

as optional being set at nought. The affective manifestations of a mind intellectually sound, form a battle field slippery enough and elastic enough for many a wordy tussle: victory implies the prison or the madhouse, truly an awful and wretched alternative. Which is the more so to the intellectual being? Much, I am assured from my own observation, has yet to be done towards a proper recognition and treatment of these doubtful-minded characters. In prison they are most troublesome, and often under punishment, being the slaves of their passions or the dupes of their fellows. While being treated on the same plan as the others, treatment avails not with them, chastisement and advice are alike lost. Their life is spent in prison, and their influence there is most injurious. It seems to me that the advisability of their separation as a body from the bulk of our convicts is a matter well worthy of consideration. Prison is not adapted to them and they are not fit subjects for an asylum. They occupy a mid-path, and here principles of treatment could be brought to bear upon them which would combine at once the discipline and repressive measures of a prison and those moral influences which science has of late years so successfully adopted in the management of the insane. Their bodies could be exercised and work got out of them, while special attention would be directed to cultivating their minds and training them, as far as possible, to a correct appreciation of the standard of right and wrong.

It is really surprising how little it takes to unhinge the passions and change the whole demeanour of some prisoners who may hitherto have been well-behaved. For a time the man is lost in his rage, his reason may be said to have left him, he cares not what he does, if indeed he knows. The "latent devil" which we are told exists in the heart of the best of us, bursts forth with terrific violence. One prisoner, strong and healthy, I remember, whom I refused a dose of medicine, broke out in this very devilment without any words having passed between us, and smashed his window and everything his cell contained, roaring and execrating all the time. Having done all the destruction he could, he settled down and was quiet.

Another I have seen romping about like a raving lunatic in his cell, howling and blaspheming for a whole day, and tearing his hair in the most frantic manner, simply because a fellow prisoner had "peached upon" him. I know a third, thoroughly criminal, who has "the inglorious likeness of a

beast charactered in his face." He tells me that when quite young his parents turned him from their door, and that he was afterwards put by the doctor into a lunatic asylum "to be brought up." There he spent five years. During the last sixteen years (and he is now about thirty) he has been almost constantly in prison. Well, this man with the physiognomy of a horse, returns like a dog to his vomit, and by a voluntary application of this principle gets six meals a day out of the authorities instead of three. Nor is he particular as to the utensil from which he thus serves himself a second time.

I give these few illustrations out of many, merely as instances of the class of mind that one not unfrequently meets with in prison, and which it is necessary to bear in mind when prisoners are being treated of.

Among the many by-ways that a prisoner has to obtain his special ends, cunning and imposture are freely made use of. Of all modes of malingering that of feigning insanity is the most troublesome to the physician. It may be thought that imposture would readily be detected in such a class of men; and so in most cases it is. But when you have to deal with the tacit and strange conduct of one whose wilfulness is most determined, and whose feelings are unaffected by habits of the most disgusting and odious character, in combination with an intellect probably low, at least uneducated, and certainly unrefined, the facility of a diagnosis is much impeded. Again, the physician must for his own sake be careful, for action is taken with the man according to the opinion he gives. A rash judgment might unjustly entail upon the individual the stigma and punishment due to an impostor, or permit the feigner to be successful in the object of his deception. The study of feigned insanity is therefore really useful in point of practice, as well as interesting in itself psychologically.

There is a general regulative law of mind, whether sound or unsound, according to which an individual acts, and by the constancy of which, within somewhat arbitrary limits, the individual is gauged. But when a man in one state of mind feigns to be in another and distinctly different state of mind, the usual gauge is not so appropriate, and much difficulty often thus arises in arriving at a correct estimate of him. Some by-law would seem to be in operation—his individuality is changed in appearance. With a view to ascertaining the actual state of mind, we seek for a possible concurrence of certain external conditions, and of mental modifications which would so act the one upon the other, as to give birth to

peculiarity in the mode of outward expression. In ordinary life, we trace backward the condition of the apparently insane mind to some excessive strain or inherited taint, or perhaps to both, and a decision is comparatively easy.

But with the prisoner the case is altered. We have a man under circumstances distasteful and irksome to him, to escape from which there is nothing that he would not try. One means of release from the hard work, precise regularity, limited diet, and restricted intercourse of ordinary prison life, is insanity, and hence the attempts made to simulate it. When a prisoner comes under observation for peculiar conduct, the strong motives that he has for deception, whatever they may be, cause suspicion at once. These motives combine in a mind badly organized, and probably morally poor, with a determined and often violent self-will, and the result is that the insane condition, which is necessary to effect the purpose, but which cannot be induced at will (as bodily disease in some forms can) is feigned. In some such combination as this, under circumstances of compression, are to be found the concurrent agents needful to imposture.

The convict who feigns insanity, or who, in his own phrase "acts barmey," is (judging from the cases I have seen) of the average class of criminals, not intellectual enough to see the folly of his act and restrain himself, and not such an idiot as to be incapable of planning, and to some extent carrying out a scheme. His moral sentiments are, as a rule, much distorted. He is impulsive and wilful. He is pretty safe to be an old hand, a jail bird. His conduct in prison will not usually be exemplary; he will have shown some tendency to shirk work, and not unfrequently he is a "doctor's man," with his name figuring in the casual sick list. The less of this, however, the better for the success of his scheme. I have never seen an old man "try it on;" his life-experience has taught him a lesson in this respect at least; his practice however may be more healthy than his precept. The usual age runs from twenty to thirty-five, when the passions are most vigorous, and when the will has full sway, ill-fashioned, and impetuous. It is such a will as this that Dr. Maudsley has characterized as—"the explosive and dissipated display of an inferior, and mostly destructive emotional force," in opposition to that calm, creative will which is, "the quiet, self-contained activity of definite productive aim."

A convict who successfully simulates madness, and deceives

the doctor, is of course treated as really insane, *i.e.*, he is sent first to a prison in London, and thence in time to Broadmoor Criminal Asylum.

The circumstances or motives that induce a prisoner to simulate insanity may be put down as mainly three :—

First.—He may attempt it soon after his arrival in a particular prison, with a view possibly of getting an early start in favour of his being thought “cranky.” This is a weak policy and one that will rarely succeed ; for although sudden and great transitions in circumstances may seriously affect a mind, there is nothing likely to do so in the removal of a man from a close prison to one where public works are carried on. It is unlikely that a criminal, after undergoing six or nine months of solitary confinement, without hurt, will be affected by madness on being permitted a freer, although restricted, intercourse with his fellows. If indeed the mind had been unhinged at all by solitary confinement, the change would naturally be recommended with a view to its restoration.

Secondly.—The prisoner gets tired of the work and the discipline of a particular prison, and is willing to effect a diversion by “acting barmey,” and thus procure his removal to London, whence, finding his game won’t work, or by a judicious appearance of recovery, he may be sent to some other prison. This removal *from* a particular prison may be said to be the leading motive. It may or may not be a matter of indifference where they are sent finally.

Thirdly.—The pretence has some relation to present punishment within the prison, whether as a wind up of an outburst of temper on being awarded a punishment, or with a view to escape a prolonged course of punishment. Motives may exist minor to, and apart from, these, but they will generally come under one or other head.

The form of insanity simulated, or rather the form to which the pretended symptoms are most akin, is a secondary, although not uninteresting question. The popular notion of a madman gives to him the maniacal character, where to be furious, noisy, and violent, are essentials. This may be assumed but it cannot be kept up. The individual may do, may overdo his part for a time, but nature gives way and bodily exhaustion prevails. Some of the characters of dementia are well counterfeited by prisoners ; having made up their

mind to the pretence, they care not to retain a particle of decency, and give way to the most disgusting and filthy acts. The following cases, extracted from Annual Reports made to the Directors of Convict Prisons, will best describe the extremes to which some will go, and will show, too, that the "subjection of women," however much it may be understood, is not always easily attainable. In the Blue Book for 1859, Mr. Bradley, of Pentonville, gives the following case :—

Convict G. B. very soon after admission began to be idle, dirty, and insubordinate. His conversation was incoherent, and his behaviour absurd. He threatened the officers, and loaded them with abuse ; he smashed his windows, broke his furniture, and tore up his clothes ; he passed his urine in his dress, in his bed, and about his cell. He wore around his neck, fantastically disposed, a large piece of cloth saturated with filth. The loathsome condition of his person may be imagined from what has been described. There was no doubt of the case being one of imposture, and the prisoner was therefore frequently punished with bread and water in the dark cell, but without effecting the slightest amendment. At last he was sentenced to twenty days' confinement to his own cell, upon a diet of Indian meal—the special punishment. Before half this sentence had expired he was disgusted with the Indian meal, and despairing of success as an impostor, became rational and orderly, promising also good behaviour for the time to come.

Dr. Guy, when Medical Superintendent of Millbank Prison, reported the following cases, which occurred there. The first is in 1860 :—

This woman had the strength of a man, and the agility of a monkey. She, sooner or later, burst all the strait jackets in use on the female side of the prison, repeatedly tore down the strong canvas of the padded cell with her teeth, and even broke down the ceiling of the cell. She said she would not behave well unless in association—*i. e.*, amongst other prisoners—and that neither kind words nor punishment should conquer her. Her previous conduct in three times assaulting her fellow-prisoners rendered it both unsafe and unjust to others to place her in association. She had also previously threatened and assaulted the officers, and had made several attempts on her own life. By a course of firm treatment, directed to the prevention of injury to herself and others, and the use of such restraint as would have been required if she had been mad, she was brought to confess that she had been wrong, to acknowledge the propriety of the course adopted, to express her gratitude for the consideration shown her, and to promise amendment.

Again he says—

In the past year (1862) two cases have occurred—one among the men, the other among the women, which, though they never deceived either the resident medical officer or myself, evinced a perverse ingenuity, and strange perseverance in disgusting habits, which, had they been practised anywhere else by any person not in prison, would have been considered as of themselves sufficient indications of insanity. The male prisoner, F. H., continued for seven months to conduct himself in such a manner as to require that both his person and his cell should be cleansed every day; and the woman, with the same initials, F. H., persevered in the same disgusting course for five months, during which she constantly put on an air of the most perfect imbecility and bodily helplessness; but at the end of this time confessed that she had been practising a deception, and expressed a hope that she should not be punished for her conduct. The treatment to which these prisoners were subjected as the natural consequence of their own acts, was such as might be supposed sufficient to deter any person from persisting in such courses.

And so it might!

A sort of semi-imbecile form of insanity is sometimes assumed, in which the prisoner, behaving quietly, tears all his clothes, lies naked on the floor, refuses his food, and acts the fool.

It would be vain to attempt any classification of pretended signs of insanity so as to compare them with the real indications of disease. Instead of doing so I shall, in the following cases, simply and briefly detail each, and mention points of character or of note as I go along, keeping in view the individuality which has actual foundation, rather than the mere sham appearances offered for our observation.

CASE I.—My attention was called one day to a boy, J. W., aged 19, of singular and deceitful character, who had made a trifling attempt to cut his throat, the result being a few scratches, not at all deep, on the left side of his neck. He is a healthy boy; but unwilling to work, and not unfrequently gets himself under report and punishment. Some little time after this he stripped himself naked in his cell, and made himself to all appearance mad, jabbering about seeing the Queen, and having an interview with her, and wishing her to be sent for “to take him out of this.” He went on in this absurd manner more or less for two days; but being kept in the punishment cells, he did not like it, and gave up his imposture. Another night, about ten months after, he stripped again quite naked, and rushed from his cell, calling out, “Black man! black man! oh, the black man!” and pointing as if

he saw his sable phantomship. He whined and quivered with his voice, and his body kept time to it by an up and down movement. He persisted in keeping his face towards a corner, and would give no answer to questions ; but when spoken to sharply he stopped, listened, and then went on again. A very slight application of the galvanic current, which was readily applied, brought him to a halt. He declared he would give no more trouble in this way if he were let off ; and he has not had a recurrence of the black man since. Although he would not trust himself to look one in the face, he was careful to watch anything that was going on, as when the battery was introduced. The peculiarity of this case is, that he repeated the imposture, and had done so more than once. It is unusual for the same one to pretend insanity repeatedly at the same prison. The attempt at suicide was of no gravity—a pretence in the hope of sympathy.

CASE II.—C. H., aged 28, son of respectable parents, but a very dodging rascal, and lazy, stripped himself naked while at work in the quarries, and rushed about in an excited and noisy manner. Was taken to the hospital. Will answer nothing when spoken to ; but peers into one's face with a peculiar and even silly expression, which is aided by a partial squint. He repeats, in a rambling fashion, the words "father," "letter," and gesticulates as if asking for them. He keeps moving his body from one foot to the other, like a restless bull, and twists his mouth and jaws as if gnawing something. A few days in the refractory cells upon reduced diet effected a cure; he expressed his sorrow to me for what he had done, with a request that he might be at once allowed to go to his work. Such were the notes I preserved of this case. I found afterwards the entry "rather weak-minded" in the sheet that accompanied him to prison. His soft and unhealthy-looking face, cock-eye, and pursy lips, together with a speech thick and sibilant, from profusion of saliva, favoured this view ; but there can be no doubt he possesses a large element of the knave, and I am much of opinion that, notwithstanding his appearance, he is more the one thing than the other. Still had he tact and ability to develope a good scheme of insanity, there was much to help him. Unfortunately for him, he selected the excited form while his expression was more adapted to the low and vacant manifestations of the demented or imbecile.

CASE III.—Here the impostor took the form that was most suitable, and played the soft part that would be expected of an ordinary-going hypocrite. I was knocked out of bed one night to see a prisoner, J. S., who was said to be "in a peculiar way," and who had attracted the attention of the night officer by shuffling in his cell. His door was opened and I found him standing in his shirt looking upwards in a tender, beseeching manner ; his lips kept measuredly repeating, in a subdued whisper, some word, which I found to be "Heaven." I questioned him, but got no answer, and I then ordered him to be taken to the infirmary for the night, and two officers led

him off. He made a great difficulty at first, as in moving forward his knees would not bend, and his lower limbs were fixed, so that his whole body swayed forward on his feet. I tapped him on the shoulder, and said that although he were out of his mind, there was nothing to prevent him moving his joints. He took the hint and walked properly. He was put to bed, and the night nurse reported that he sat there all night staring vacantly, and murmuring as already described. He would not speak, and affected to take no notice of anything. There was no doubt in my mind about the case, and in the morning he had a touch of the battery, under directions from the Medical Officer. This he by no means relished, but would promise no better behaviour. He was told that he would have a strong dose of it twice a day until he gave up his folly. He did not like the prospect, and after thinking it over a little, he made a voluntary statement that he would behave himself, and requested that he should be allowed to go to his work. This request was not from enthusiasm in his work, but was due to a hope that by showing a willingness to work he might avoid being reported and punished. The principal feature in this case was the fixity of the limbs. I do not think it was intended as a part of his scheme; I believe it was an evidence of the tension of his mind, and as his mind was fixed intently in the one groove by a feeling of determination, so his muscles had their freedom of play checked by the unconscious action downwards of the same feeling. The suspense which overtakes the body when the mind is engrossed is an ordinary phenomenon, but we have it strongly marked here where the mind was intent upon a misrepresentation of itself.

CASE IV.—This case presents similar characters, and they are, perhaps, types of a certain class of cases where hypocritical quietness and devotion are the main conditions assumed. The man, M. D., had frequently complained to me of various ailments, none of which could be detected. He disliked his work. I was summoned to see him one Sunday evening, and found him standing in his cell erect, and in an attitude of great devoutness, with his head duly poised on one side, his hands clasped and extended, looking most imploringly upwards. He kept mumbling inaudibly with his lips as if in silent supplication. This had been going on ever since he had supper, some two hours previously. So earnest was he that he took no notice of the questions I put to him; and I fear I was uncharitable enough to jerk him suddenly out of his cell by the coat collar. With a rapid glance round to see how the land lay he got into position again. He was at once removed to the surgery and permitted to taste of the battery. He took it quietly at first, but the current of galvanism came to prevail over that of his thoughts, and he cried "Oh! oh!" I asked him if he would give up his nonsense. No answer. Out came the regulation button a little. "Now will you give it up?" "I'll try, sir." "I can't have any trying; will you give it up?" "Oh! yes, sir; stop! and I'll give it up." He then stood up among the officers, looking rather

ashamed, and began to talk of his mother being subject to similar attacks. I sent him off, telling him he was a disgrace not only to his mother, but to all his fellow-prisoners. I have seen little of him since.

CASE V.—W. K. had been a soldier, and was a man of most cunning and determined disposition, often under punishment, and very liable to petulant and quarrelsome outbreaks; he was constantly getting into trouble either with the officers, or with his fellow-prisoners. He had a sentence of seven years, and was very hopeful of being sent out to Australia. When he found that the final batch had been sent across the seas without him his disappointment was unbounded, and he resolved to do no more work here. He soon found a pretext for admission to hospital in a renal complaint from which he suffered. When getting nearly well he was about to be sent out to his work, when he assumed a fierce and demoniacal—I can call it nothing else—form of madness. He got very uproarious in his conduct, and abused the officers in the foulest terms. He splashed his cell, and besmeared his face with blood, which he obtained in astonishing quantity from his nostrils. His mode of operation was this: with a piece of twisted paper he poked and irritated the upper and back part of his nostrils, which were tender from previous ulceration in them; then hung his head out over his bed until his face was like to burst, and he was able to draw the requisite supply. He added to the effect of his variegated physiognomy by frightful grimaces, and the most horrible howling noises. These he intermitted and relieved by whistling aloud, and imitating the cries of various sorts of birds and beasts. Like a parrot, he often repeated in the same tone the words "Oh, yes!" or something of that sort. The mewing of the cat and the laugh of the hyena he counterfeited admirably. Being confined in a strait jacket, two of which he burst and rendered useless, he bumped his head, bull fashion, against the wall and broke the plaster down, so that he had to be removed to the padded cell. He there continued the same noisy game, was most insolent to the officers; but when I said anything to him or advised him, he was quiet and sullen. His look was something awful when he was at full steam, with bloody face and glaring eyes. His nights were spent partly in sleep, partly in roaring out at the top of his voice. Sometimes he would take a portion of his food, at others he threw it all over his cell or at the officer. He would refuse it entirely for days together. He was of a constipated habit of body, and his urine was very phosphatic; but these had no relation to his present state, as they had been noticed before. He continued in this way for about a month, and in the end he was cured by a flogging, from which he has derived great benefit. From being one of the most troublesome men in the prison he has become well-behaved. How inexplicable is such a desperate course! It illustrates a condition into which some prisoners fall: ill-behaved, idle, and disappointed, they are driven into a corner. Something of an extraordinary nature must be

done ; not the result of a misguided deliberation, but more in the way of a passionate and violent ebullition, which is prolonged by a determined and untameable volition. W. K. was a man who would stick at nothing—cunning on the one hand, vicious and unsparing of himself on the other. On more than one occasion he considerably reduced his physical condition by a voluntary abstinence from food. When in proper humour, he is a useful and handy man, but most inconstant. Unlimited preaching and lecturing would avail this man nothing, although I have seen him shed tears when being exhorted quietly ; nor, indeed, is he easily got at by punishment ; humour him, and you may hope for his usefulness at least ; but he is apt to overstrain this by some extravagant request, which, if not granted, risks the success expected. At present he is under control, having been beaten, and being now employed at easy work inside.

CASE VI.—Minds of a very narrow calibre may counterfeit aberration of the limited faculties they possess, and this is a case in point. The man, or rather the big boy, H. C., happens to have an intellect of this inferior sort which shows itself in a weak and almost silly expression of face, whose brilliancy is by no means enhanced by a set of scrofulous eyelids. Volitionally he is equally poor, and would make a ready dupe ; and I am not sure but he was so in the present instance. One cold morning, while at work in the quarries, he stripped himself quite naked and ran about until brought in. When I saw him he was standing, still nude, facing a corner of his cell. I wheeled him round, and asked him what was the matter, but got no answer. I then asked, in a firm tone, what he meant by this nonsense. With a silly and half-terrified air he said, quiveringly, “It’s all blood ; it’s all blood ; I daren’t put them on,” pointing to his clothes. “Show me the blood.” “It’s all over my shirt.” “Show it, then.” He took up his shirt, and pointed in a mystified way first to one side of the breast, and then to the other. In answer to my query, he said that was all, and he could not put them on. He accounted for the blood being there by murmuring something about “doing it in the middle of the night.” There was no blood anywhere. I sent at once for the galvanic battery, and after a few touches he said he would never do it again ; and I sent him out to his work. He told the officer after, that the operation rather warmed him. This attempt was characteristic of the soft and easily-led-away character. He had for some time been complaining of his work. I was sure he was an impostor. I saw his assumed expression of fright change when I began to question him sharply. There was not the ability to carry out the determination.

CASE VII.—If I were to adopt the ordinary nomenclature in this history of cases I should say we now come to deal with one of pretended suicidal monomania. H. G., 21, a contemptible, sneaking, ill-conditioned creature, first brought himself under special notice by trying, apparently, to strangle himself. To attain his object he had tied his braces and his stock together, and then suspended himself by the

throat to the window. He was cut down before I arrived, but was now trying to make believe he was dead, and, to give him credit, he did it well. He made himself rather stiff, to be sure, for the recent event, but to the uninitiated his condition would certainly have given rise to the gravest apprehensions. There was no movement, and but a minimum of breath. Making up his mind to come round, he began a rattling noise in his throat as if it had been disjointed. Ultimately he assumed the air of a madman, with complete silence, and a half-wild and vacant stare from his sunken eyes. He was put in the padded cell, and invested with a strait jacket, with a view, as he was given to understand, to prevent his attempts at self-destruction. He had given forth his intention of dying here, and he felt sure he would. The fact was he was determined to do no more work, nor would he, if he could have helped it. Not appreciating the care that was taken of him, he permitted himself to recover from his mental malady. He effected his release from restraint by this means, but took to sickness and frequent vomiting, and managed so well that his condition was really weakened, although he made things appear worse than they were. When he was in this reduced state, he one day got annoyed, and burst into a violent temper, and required several men to hold him. This outburst and show of strength was ill-suited to his case, and he allowed a speedy convalescence, went to his work, and has behaved remarkably well. The intellectual as well as the moral tone of this prisoner is low. Fear of consequences only would deter him from doing things of a vicious turn, to which kindness might serve but to stimulate. If he were going on well under certain discipline, the worst thing for him would be to relax that in any way. He cannot be trusted with himself. There is a moral perversion.

CASE VIII.—G. H., a slow, thick-headed fellow, was detected in an attempt to steal a 12oz. loaf one Sunday morning, and placed under report. Disappointed at his want of success, and dreading punishment, he had planned what possible course was left to him to modify his circumstances. His evil genius was ready with ‘a pretence at hanging, and get to the infirmary.’ Accordingly the day is spent in maturing his scheme and making preparations. A piece of twisted oakum is found; and the unhappy man “gets himself up” just before the evening visit of the officer, who finds him suspended, or rather stretched up by the neck to a peg in his cell, high enough to appear awkward, but not by any means beyond the bounds of perfect safety and freedom of breath. Being taken to the hospital he sees the doctor—who is supposed to be in ignorance of the little affair in the morning—and declares that the ills of this life are too many for him to bear up against, and that he has a fixed determination to get out of his misery by doing away with himself. He is very desponding, and won’t be cheered, and is very desirous to impress everyone with his unhappy condition. He does not commit himself to any active show of insanity; he is sane enough not to try, for he knows he has not the capacity. After a few

days of "observation," he is discharged, with a second report for having feigned suicide. Such is not an unfrequent case. Being caught offending, they try some means to escape, and often "jump from the frying-pan into the fire." A blunt intellect, afraid to face consequences, often seeks a shelter from anticipated punishment by cowardlike rushing into some act that will serve to modify, even at the risk of aggravating, the previous offence. In this "melancholia with suicidal tendency" sympathy might also be an object. It is to be borne in mind that with some an offence of a more or less grave character might drive to a real foolish act, but in this case I am sure it was a pretence.

CASE IX.—W. B., a vicious fellow, had pretended to suffer from different bodily ailments, and was often under punishment for insubordinate conduct. During one period of punishment he began to act the part of a madman by refusing his food and persevering in it. With great sullenness of temper he kept up a cool and obstinate demeanour. There was no raving or violence at the outset, nor was there the appearance of straining to act a part, and really, if he had not been a suspicious character, there was that about his case which would tend to banish the idea of deception. He went for several days without his food, giving out as his reason that poison had been put into it by some of the authorities. His bowels acted, and he slept at night. His imposture being seen through, he had an application of the galvanic battery one morning. He took it well at first, but soon began to kick and bite, and roar out that he was Beelzebub, king of hell, and certainly might have passed for that prince of devils. The expression of his face became something awful; the demon-like leer that came over it and seemed to light it up, I shall not soon forget. He required six or seven men to hold him, and remained unvanquished. He slept well all night, and took his food in the morning, but almost immediately afterwards began to rip up the sides of the padded cell. His conduct was now violent, and he tried to bite and kick all who came near him. He was very abusive, and had to be restrained by the strait waistcoat to prevent him assaulting those who approached. A repetition of the battery a few days after proved too much for him, and with some appearance of shame he confessed his imposture, and promised amendment. Such a character as this would only be too glad to be thought insane at any cost, if he could thereby gain his end; nor would he scruple to inflict severe injury upon anyone. This man has a most vicious disposition, with strong determination. I find that when he received his sentence of seven years' penal servitude he got so violent in the dock that the judge at once added five years to his sentence. He not only assaulted the policemen in charge of him, but attempted to get at the magistrate, whom he abused roundly. He has been frequently under punishment since his imprisonment for assaults made on warders. I find, too, that when in Horsemonger Lane Gaol he feigned insanity with a similar unsuc-

cessful result. How are we to account for such a course of action ? The whole known tenor of his life points to the co-existence of defective moral faculties with an intellect quite up to the average standard. A curious question is here evolved :—Can a man morally insane, while in one of his impulsive moods, counterfeit symptoms of ideational insanity ? The query takes us into a complicated field. The outward impulsive actions of one labouring under affective insanity vary in their destructiveness or atrocity in proportion as his deliberative volition is able to exert its healthy and restraining power. Dr. Carpenter says that “in so far as the course of his thoughts and feelings is the mere result of the action of external impressions upon an organisation having certain respondent tendencies, must Man be considered irresponsible for his actions, his character being formed *for*, instead of by him ; but in so far as he can exert a volitional power of directing his thoughts, and controlling his feelings, may he rise superior to circumstances, and make the most advantageous use of the intellectual faculties with which he may be endowed.”* In such a case as the question implies we have an organisation with *insane* respondent tendencies, morally, and therefore an individual so far irresponsible ; but we have also, superposed upon that organisation, an intelligence capable of correcting, or, at least, modifying those tendencies ; but which may be employed, as under ordinary circumstances it is employed, in developing a scheme of deception and misrepresentation. The volitions may be so far submerged in the instinctive impulse as to destroy the responsibility, or they may be so far exercised by a reasonable intellect as to preserve it.

Professor Bain, in his work on “Mental and Moral Science,” p. 395, thus touches the subject: “There is a middle condition between the sane and the properly insane, where motives have not lost their force, but where the severest sanctions of society, although present to the mind, are unequal to the passion of the moment. Such passionate fits may occur, under extraordinary circumstances, to persons accounted sane and responsible for their actions ; if they occur to any one frequently and under slight provocation, they constitute a degree of moral inability verging on the irresponsible.”

Arriving at this conclusion from an examination mainly of healthy manifestations, the able philosopher is, I think, somewhat over-cautious in taking the moral inability here indicated only to the *verge* of the irresponsible. Had he said “amounting to” (possibly, at least) instead of “verging on,” evidence would not have been wanting to support him in the assertion.

We have already seen that moral depravity, the “insane temperament,” or even moral insanity, may co-exist with healthy intellectual powers. Dr. Maudsley has well illustrated this, and gives the following : “The extremest case of moral insanity which I have seen was in an old man, aged sixty-nine, who had been in one asylum or

* Principles of Human Physiology, p. 456.

another for the last fifteen years of his life. He had great intellectual power; could compose well, write tolerable poetry with much fluency, and was an excellent keeper of accounts. Morally he was utterly depraved; he would steal and hide whatever he could, and several times made his escape from the asylum with marvellous ingenuity. He then pawned what he had stolen, begged, and lied with such plausibility that he deceived many people," &c. Prison had been tried with him many times, but unsuccessfully. Being morally mad, he could yet do all that I have quoted, and much more. I am certain he could have feigned insanity—ideational insanity.

If we grant that our hero, W. B., is morally insane (defective he certainly is), and at the same time of fair intellectual ability (which he is), I would say that he being under pressure or punishment, and without adequate means of gratifying his ordinary violent propensities, his moral obliquity, of whatever degree, shows itself in a burst of temper, which being guided—or misguided—by an intellect influenced by motives, expends itself in an attempt to simulate insanity with unsound ideation.

Curiously enough we have W. B. twice undergoing some such process as this.

CASE X.—E. M., 21, avowedly devoid of religious belief, made a slight attempt to hang himself in his cell with his braces. When I saw him he presented a wild and restless appearance; he kept constantly calling out about a black man coming to kill him, and rambled about a coffin, hell and brimstone; he had certainly an aspect as of one in a fright, or having just been startled by a fearful dream, but he constantly harped upon the same few words and could not be made to change them; he, as it were, would not allow himself to be spoken to or be calmed and kept up a constant bodily motion—he was evidently a dodger. A night's restraint in a jacket tamed his exaggerated emotions, and next morning his demeanour was quiet and settled; he however, expressed his determination to destroy himself on the first opportunity as his work was too hard. This he asserted very frequently, but no second attempt was made although he had chances. A firm but excitable character. His attempt at suicide was so trifling that any real cause for it must have been weak; whilst the exalted state of the emotions that followed was certainly unnatural, if it was melancholy that impelled to self-destruction. Again, it is a very simple matter in the face of being reported for feigning suicide and madness, to evince a determination to destroy one's self, it being known or fully expected that such precautions will be taken to prevent it as will serve to delay or annul the report. Here at least it was successful, for he was discharged to his work on promising to conduct himself well for the future; and he has done so. Apart from the question of intention of suicide, it is sometimes expedient to give these men (of indifferent moral control) another chance without submitting them for punishment, for by this means they will go to work willingly,

knowing that they have been favoured in so far, and they will struggle to keep from misconduct, lest the old affair should reckon, or turn the tide against them ; but it would not do very frequently to let the prisoner off without an admission of his guilt, for on any after occasion the previous occurrence being referred to, might tend to embarrass an investigation into his case ; besides, the probability of punishment restrains imposture.

CASE XI.—C. M., 21, a man whom I had never before seen, made a tremendous row in his cell one night about ten o'clock, and wanted to get "at him to kill him ;" the imaginary individual being apparently some short distance off ; he was excessively violent and required several officers to hold him ; he had a peculiar broad cast of countenance with a heavy forehead, high cheek bones, and eyes unusually far apart ; his body was in constant motion, and his aspect wild. The night was very close and warm, and the officers perspired greatly in their efforts to hold him, but the prisoner's skin, notwithstanding all his exertions, felt dry, not to say cool ; there was nothing notable in his pulse. I thought his case at least doubtful ; I gave him a sedative. His violence was controlled by the application of the strait jacket, and as occurred to me after, he ceased his nonsensical talk at the same time. Next morning he was quiet and evidently did not like his confinement, he kept a determined silence, but his expression was natural. His tongue was soon found when the galvanic current searched him. He has given no trouble since. In this case I was at first deceived, in so far as I leant to the probability of his being insane. In coming to a conclusion at first sight as to the actual state of a prisoner's mind under such circumstances, it is necessary to be careful, for prisoners do at times go mad, and some do act very well.

How readily may a man's mind, left to itself in the darkness and foreboding atmosphere of a prison cell, be unhinged by an accession of terror, irresistible, self-aggravating, and unutterably painful ! An oppression greater than of a thousand nightmares steals over him and bears him helpless beyond himself,—and heavens ! what more ? A breath of air, not hot and loaded with devilish essences, a gleam of light, not phosphorescent or to be smelt sulphureous, or a manly voice and presence, not of hissing spectres or howling demons, is needed to allay the fearful and overwhelming turmoil ; anything to satisfy him—that he is in the body, a body terrestrial and with earthly surroundings. Such cases are easily supposable, and I have seen a few. I do not at present remember a case, where in prison real madness first exhibited itself in this violent and noisy demonstration at night ; such are no doubt possible, but the point is not unworthy of notice. Quieter forms occur without attracting particular attention, *i.e.*, the peculiarity may first show itself to observation in the morning.

CASE XII.—E. B., *aet.* 30, was the most thorough and the most shameless malingerer I ever came across. Not a dodge but he has tried. Paralysis, hæmoptysis, diarrhoea, headache, chest disease, fac-

titious sores and abscesses were among his many attempts. He was in fact always malingering, and it is difficult to find a pause in his history. The first time that I remember his doing the "barmey" trick was but a slight attempt, and more by way of variety, I believe, than with anything particular in view. It simply consisted in his saying something absurd in course of conversation about his food and work, and the assumption of a silly expression; conditions suspicious enough of real evil under ordinary circumstances, but of the opposite when Master B. was the individual. However, after a prolonged course of misconduct with noise and tearing up of his clothes, he was put aside for a little counter irritation with the cat. He then took on a form of madness very peculiar and not less dirty. His first off-go was to plaster all his cell with his faeces and then trot round and round among the filth until it was baked quite hard into the flooring. Being of a musical turn of mind he sang in his solitude a series of lively and jaunty airs, mostly, I suspect, in the hope of relieving his senses from the uprising odour. Stopping now and then he would look upward to some part of his cell in a triumphant and admiring manner, or else, with arms a-kimbo, the attitude would be more melodramatic and meditative, the gaze being fixed on the ground. When spoken to, he said with a cough and the pleasantest of voices, "Ah, yes! You see my little palace, I like my little palace, don't you? Wouldn't part with it for a world! Oh! no, no, no, my little palace." Then off he went trotting and skipping with great self-satisfaction. He took his food and, I presume, slept well, for he was quiet at night. He distinguished the night from the day. With little variation he continued thus for nearly a fortnight, at the end of which he got his two dozen and something else to think about. Since that he has behaved wonderfully for him, although he still has at times his, "Cough, sir, and pains in the chest," which he describes in the most piteous and whining tones. A detestable hypocrite, and devoid of any feeling of shame. A lie I should think was more congenial to him than the truth. Most persevering in his schemes, but hates work. Had been a soldier and branded with B. C. (bad character), which he has adroitly turned into B. O. the first two letters of his name. Has been repeatedly in prison. A hopeless specimen.

CASE XIII.—W. S. began in a fit of temper, and tore up his clothes and went about passionate and sulky in his cell. When spoken to, he was abusive and grumbling, and tore a second time the clothes that were provided for him. He had a general appearance of melancholy, but broke out into violent and angry fits, making loud roaring noises and smashing everything in his cell. He continued this for several weeks and gave a great deal of trouble. He then got tired of this, gave up his violence and noise, and took to a quiet and sullen demeanour and refused his food. For ten days he took no food except a few ounces of bread on one occasion. When asked why he wouldn't take it, he simply said "I can't." On the eleventh day I

ordered him a beef tea enema, and told him he should have one two or three times a day. He did not like this mode of being fed and required no more than the first. He took all his diet the same evening and after a while he went out to his work and has continued at it ever since. This man was of a grumbling and irritable disposition, and excitable.

CASE XIV.—This case has much in common with the last. W. G. was undergoing punishment for some misdemeanour, but had never given occasion for notice. One morning, the officer, on opening his door, found him lying naked on a square heap of rags which he had made by tearing every stitch of his clothing into pieces about three inches square. These pieces he had laid with great regularity one upon the other and formed the cushion upon which he rested. He answered questions by growls or not at all, nor did he take any food. His only covering was a shirt with which he had been provided, and he continued this absurd conduct for two days. The galvanic current made him give up his nonsense.

This case and the last occurred when the men were under punishment, and in both the foolishness was shown in a somewhat similar manner. The force of passion was expended in each case in tearing the clothes; in the one, violently and furiously, in the other, secretly and methodically, with an ulterior object in view.

CASE XV.—W. H. had not been in this prison a week ere he began to grumble about his work, and demand a change. He got none, as he was quite strong and healthy. At first he was inclined to take it up angrily, but one day, in a more communicative humour, he told me about his having served as a soldier in India, and that while there, in a struggle, he had been knocked down by a blow on the head from the butt end of a musket, and had been liable ever since to suffer more or less with pain and peculiar feelings, which he could not describe, in his head. He could not show me any mark, and I was not satisfied with his tale; he had forgotten many points about places, and altogether his story lacked honesty, and would not bear cross-examination. Finding that his grievances were unheeded he became sullen, and said he wished he were dead. He spoke mysteriously and rather threateningly about "doing something," and "doing for some one," so that he might be hanged. He grumped and had a hesitation in his speech, indicating not a local defect, but a tardy flow of idea. For instance, he gave himself an absurd age, and when asked what he was in prison for he said he never was in prison, and then, when pressed, that he was in prison for another man; a little more pressing brought out that he happened to be passing a window at the time when some man took a watch. He answered questions, but they had to be repeated more than once before he would do so; he looked one in the face steadily for a time, but then his eyes wandered away; he became very slovenly in his person, and would hardly do what he was told. He had a hard and vicious aspect, and was just the man to commit a cowardly assault on any one

against whom he had a grudge; nor would he care what the result was.

Now, although there was much of the improbable in his story, there was much in the whole case and appearance that one would expect to meet in a form of insanity that gradually comes on in prisoners of a low moral type. It requires special watching to discriminate, and the individuals are often of the sort that require to be "let down gently," and allowed to return to their work whenever they would indicate that they are willing to do so. In this way he was treated.

CASE XVI.—This case never got beyond the first stage. I did not see it; it was of such a transient character. G. F., a new comer, was under punishment, and one cold, foggy morning stripped himself naked, and peering into the ventilator of his cell kept crying out for some little time, "Ah! there you are; I see you; there he goes!" and such like. This attracted the attention of the officers, and he was watched. The prisoner's discovery seems to have brought him no further satisfaction or recompense; but as he stood rather in a draught, he seems to have found that it was rather chilly, and his ardour abated. He quietly and spontaneously put his clothes on, and appeared as if nothing had transpired. This may probably have been either the beginning of an attempt feigned, but lacking vigour of determination, or a preliminary to a more complete effort, which, however, has not yet come off; more likely the former.

CASE XVII.—J. C. had not been long in this prison. One morning at the Roman Catholic service he got up and shouted out something about "going to hell," and thus came under observation. The first few days he was rather noisy, but he settled down into a quiet demented condition. He crouched in the most abject manner in the corner of the padded cell. When pulled out of this and raised up, his legs gave way under him, and getting on the floor again, he crawled in the most idiotic fashion on his side and elbow towards the corner. There he lay crouched up night and day, taking not the slightest notice of anything or anyone, with his arms bent across his chest, often clutching in one hand a piece of bread, a few crumbs of which he might now and again take into his mouth. Beyond this, he took no food for several days. He would not speak, but made a slight hissing noise through his teeth and mumbled with his lips. He would not raise his eyes, nor permit anyone to look at them by raising his eyelids. His face was pale and had a silly expression. He resisted an application of the battery, merely crying out in a moderate voice, "Mr. Lowe, Mr. Lowe." He kept up his part for a fortnight. I treated him with great apparent unconcern, and told him that he might go on just as long as he chose, that it was quite immaterial to anyone what he did, and that he was only injuring his health. Beyond this I said nothing and pretended to take no notice of him. One morning I asked if he was getting tired of this, and said if he didn't give it up very soon he should have such a warming as he would

never forget. He made no answer ; but in the afternoon he got upon his feet and said to one of the warders that he was better, but felt very weak. Next morning he asked me for something more to eat and was quite rational. He expressed no regret at having acted the fool, but said that there was madness in the family, and that his mother was at the time in an asylum. I must say that this man's acting was very deceptive when taken by itself. It would be impossible, I think, to approach nearer to the abject, crouching, senseless conduct that characterizes some cases of dementia. His pulse was quite natural, his bowels constipated, being hardly open all the time. He kept the same position, and by a movement, almost mechanical, slunk into his corner. He was slovenly, and refused his food, and kept up a stupid mumbling, and sibilant, and almost inaudible sound with his mouth. His case changed in character, however, in coming from the noisy state down to this, and his refusal to look up or allow his eyes to be opened was against him. Since he went to his work I have not seen him.

CASE XVIII.—The possibility of feigned insanity merging finally into the real malady must not be overlooked. Coche, a French author, says, "*Il est aussi dangereux d'imiter la folie que de contrefaire l'épilepsie, toutes deux pouvant se développer réellement.*" One or two cases have been given in illustration of the transition. I have seen only one case which I could with any confidence detail as being of this nature. In a case of the sort it would be rash to make a positive assertion, however strong one's opinion may be. No one will deny that an effort, a strain is needed on the part of the mind seeking to misrepresent its actual manifestations, and make himself out to be insane; and the prominence of mental strain, no matter in what direction, as a cause of insanity is well known, the stress being of course in excess of the mental capabilities. Seeing then that there is a strain upon the mind of the impostor, self-imposed indeed, but nevertheless a strain, may it not come to be an excessive one, and may it not result in a shattering and destruction of the healthful cognitive energies? The case of W. D., aged 20, exhibited many points at first indicative of pretence, while the result was decided insanity and death. This prisoner had frequently pretended bodily ailment; he did not like his work, tried to evade it, and ultimately got under punishment. There had been previously nothing further noticeable in his character. Bodily he was healthy and well nourished; there was a boyish expression in his face, but no indication of intellectual weakness; he was in every way of the ordinary cast of individual as far as appearances went. Having refused to work he was under punishment in the way of reduced diet and seclusion for several days; during this time he took on a very taciturn behaviour, stripped himself naked, and lay on the floor of his cell. He became sulky and silent, and only gave abuse to the officers when they spoke to him; he went on like this for ten days, and then became more sensible—put on his clothes,

and promised to go out to work when I offered to put him in a light labour party. He went out to this, but was brought in the same afternoon as he would not work, and caused the other prisoners to laugh and misconduct themselves. I pressed him for his reason for not keeping his promise, and he said he was ashamed to work and could not go out among his fellow prisoners ; he gave me the impression at the time that this was owing to his having acted the fool. He was taken into the Hospital under observation ; at first he sat quietly, occasionally laughing and making noises with his mouth ; he gradually came to have restless nights, and would sometimes get up and try to dress himself ; afterwards he was constantly grinning and requesting to see the Priest ; he said he was a Catholic and not a Protestant, and reiterated this over and over again to everyone. There was a look of shame about him, and he told me he had been ‘abusing himself’ a great deal of late ; he denounced the other prisoners in the ward and told them they were scheming. Real madness had now taken place of suspicious appearances, and he got noisy and inclined to assault the other prisoners, so that he had to be put by himself ; he rambled and talked constantly, detailing scenes of absurdity and obscenity. He was ultimately sent to Broadmoor Lunatic Asylum—where he died.

There was much in the outset of this case to favour the idea that he was an impostor ; his early pretences to bodily illness, his stripping naked and refusal to go to work, his general silence and sulky conduct towards the officers, and his quietness at night before admission to Hospital form a set of symptoms, which taken together, and in prison, are very strongly suspicious. And when we add to this the fact that during this first stage, he intimated in private his wish to go to Millbank prison, “as he would be all right there,” our suspicions are supported by very powerful evidence of motive and of scheming, viz.,—that of the man himself. He knew he would be sent to Millbank if thought insane. Taking it for granted that these symptoms were feigned, I should think that the repeated ‘self-abuse’ proved too much for a mind already strained and disappointed. I repeat that it is necessary to take the early symptoms as a group, for singly they might apply either to real or simulated madness, while, as a body, they favour the latter as the state of the prisoner. The character of the symptoms and of the man’s conduct was at first quite different from what it was when he became actually insane.

A few remarks on Feigned Insanity among prisoners, and I have done. The scope for demonstration or peculiar behaviour in prison is limited. A person in ordinary circumstances, or a soldier feigning, has his part to play in his usual relationships and among his acquaintances, and can be gauged accordingly ; while the prisoner is either in a cell by himself, or, if among others, always under the eye of an officer. The

field of observation is wide in the one case, narrow in the other; but there may be an equal difficulty in them as far as detection goes, if the physician has to trust mainly to the facts that he himself, or perhaps a trustworthy subordinate, discovers. In either case it is necessary to treat the man more or less as insane in order to make out his sanity and his imposture. We are liable to be thrown off our guard by the extreme length to which the impostor goes, and this in itself indicates a mind of defective moral tone. The very low type of the thoroughly criminal mind, naturally bordering on the unsound state, necessarily weakens the otherwise striking contrast afforded when the threshold of sanity has been crossed; and the physiognomy of the individual is wanting in that reflective expression that betokens the well-ordered mind. The prisoner's physiognomy is more at home with certain of the lower emotional or impulsive expressions, as of anger, cunning and resentment, and these are of value to him in his efforts at deception. Notwithstanding this, he cannot give to his maniacal impersonation that depth and power of feature which, in all its changeableness, marks the maniac. When he subsides from a paroxysm, the feigner can scarcely get beyond a stolidity of countenance that betokens nothing of the inner workings of an exaggerated mental condition. If we could overlook the state of the eye, many prisoners could approach closely the abject demeanour and void features of dementia. Melancholia does not suit the prisoner, or it does not occur to him as likely to serve his purpose; very frequently after a pretence at hanging he will begin a tale of woe and wretchedness, but he does not lay himself out for a course of deception. The completeness of the intellectual aberration is a weak point in the insanity of the schemer, and one which he often pays great attention to. He thinks he ought not to permit even the glimmerings of reason. He will not answer questions at all, or if he does his replies are untruthful or absurd. Again there is an unnatural variableness in the character of the symptoms displayed, and several forms of insanity may be indicated in one case. The feigning prisoner in his desire to attract notice usually resorts to excessive means, and that for two reasons; he may think some extravagant act is necessary to his part, but he knows besides that if he merely does something a little out of the common, he will come, not within the doctor's range, but under the governor's notice for misconduct. To strip naked as a sensational outset is a favourite notion. This is the most extravagant, and at the same time the most

harmless thing he can do. He may tear up his clothes or smash whatever he has in his cell, but punishment is thus involved. Midnight is a favourite time for the violent to begin. Everything is then quiet, and he is sure to see the doctor. The noisy or demonstrative form is usually, as might be expected, of short duration. It will be readily understood how impossible it is for a man to sustain for any length of time the character of the raving maniac, whose incessant and unwearying activity (now-a-days of comparatively rare occurrence) is a puzzle to the gravest minds. Look at the exhaustion that marks the effort of the actor on the stage, who certainly brings all his powers to bear on the representation. When, instead of making a frantic show of emotional exaltation, the feigner subsides into a silent apathy, with behaviour abject, debased and filthy, his void intelligence and blank expression will, for a time at least, try the diagnostic skill of the well-tutored alienist. The learned Dr. Jacobi, director of the Siegburg Asylum, Prussia, was engaged, we are told, to examine Reiner Stockhausen, who was accused of theft and suspected of simulating insanity. He declared after several months' observation that he was afraid to give an opinion; later, that the accused feigned insanity; later still, that he was deceived himself and the accused was really mad! Who can say he will not be deceived?

The diagnosis or detection of feigned insanity rests not upon any individual signs; a group of conditions and manifestations are necessary. Suspicion is, in the great majority of cases, first excited by the existence of a motive for deception. Feigned insanity and motive cannot be dissociated; the former necessarily implies the latter. Frequently with the prisoner there is some immediate circumstance that urges him to attempt imposture. He does not introduce his attack by any premonitory signs such as often mark the approach of the real disease. No doubt an irritable temper may have brought him first under notice and punishment, through which he may come to practise the deception; and this must be borne in mind. But he will not show the restlessness and eccentricity of one whose mind is gradually giving way; he almost invariably becomes suddenly and completely mad, and calls attention to himself by some most extravagant proceeding. Conversation, a good test, is usually avoided by him; and he will generally turn his eyes away, or shut them, taking an occasional peep round. It would be a needless task to attempt to lay down definite rules for the detection of feigned

insanity. Care and patience must be bestowed on the study of each case by itself. Some lay stress upon one point, others upon another ; but the case must be taken, as it were, collectively. The possibility of the case being one of real insanity, notwithstanding the absence of some usually expected signs, or the presence of manifestations of a suspicious nature, must never be lost sight of. I have attempted to point out the characters and results of those cases of pretended insanity that have come more immediately under my notice, and of which I have preserved notes. I have never seen one where the refinement of "lucid intervals" was attempted ; but I find in the prison records an account of a feigner who continued his game for four months, with brief periods of rational conduct and conversation.

The ingenuity of the prisoner in devising extraordinary lines of conduct is restricted by his limited sphere of action. Impostors are thus often thrown pretty much into the same groove ; and hence a probable general course of behaviour may be indicated as likely to be pursued by them. The main points may in brief be thus summed up :—A prisoner has got into trouble, and, perhaps, is frequently punished, being lazy or insolent ; he seeks a change of scene and discipline, and he will get it if he can make himself out mad. Some extravagant demonstration is fixed upon, and is carried out either among his fellow-prisoners or in the dead of night. He strips himself naked perhaps, or shouts out with a show of violence or of fright, generally finding some few dismal words to repeat over and over again. If quiet, he lies about in his cell, and mumbles inaudibly, or pretends that his food is poisoned, and rejects it. There is a suspicious and sudden completeness of mental alienation, without previous peculiarity of conduct ; questions are unheeded, or stupid answers are given ; the expression of the face, and especially of the eye, does not bear out appearances. He rests well at night—at any rate after the first one,—he allows himself to be pulled about, and to be annoyed without grumbling or taking any notice ; his language is abusive, and his general conduct slovenly, and perhaps filthy. His bodily health is good. By and by the character of the symptoms changes ; from being restless and violent, he settles down and becomes quiet and moping, or the reverse takes place ; this is suspicious. He may for a while court the relief afforded by this change, if not detected in it ; but he becomes tired of the irksome struggle. Both body and mind

exhibit signs of a desire for relaxation from constraint; with an effort he breaks gently to some subordinate that he is himself again, and is all right before the doctor's next visit.

The means recommended to make a man desist from his imposture are many, and need not be recounted here. Whether moral or physical, they have, in a measure, to be adapted to the particular cases under treatment. Where imposture is evident, a small galvanic battery has wonderful influence, and is safe. Its indiscriminate application would be cruel. It should be used not to detect, but to put a stop to the pretended madness.

Voluntary Patients in Asylums. By STANLEY HAYNES, M.D.
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(Read at the Quarterly Meeting of the Medico-Psychological Association, held at the Royal Medico-Chirurgical Society, October 28, 1869.)

It has appeared to me highly desirable, if not requisite, that there should be some extension of the present system for the admission of boarders into establishments for the insane, and that the anomalous and confusing condition of the existing laws referring to them, by which each division of our country has its enactments at variance with the others, should be amended in such a manner that all parts of Great Britain and Ireland should be subject to one scheme of legislation on the subject.

I propose to indicate the existing requirements of the lunacy acts respecting boarders, to show the advances already made and the imperfections now experienced, to offer some proofs of an extension of the law being necessary, and to make some suggestions for further legislation concerning the semi-sane we meet with in psychological practice. I believe there is great, if not urgent, room for improvement, though it cannot be denied there are many obstacles to impede a satisfactory settlement of a difficult and delicate topic. Many persons who are not of unsound mind, but who find their mental health is endangered or weakened, might, by an expansion of the present lunacy laws, be received into asylums as voluntary patients or boarders, with strong probability of

speedy recovery, protection from danger to themselves and others, absence of predisposing and exciting causes and the means of satisfying morbid cravings, with diminution of family disturbances and enmities, and with a due regard to that popular bugbear, the "liberty of the subject."

It is so abundantly proved, by the reports of the Commissioners in Lunacy and the experience of all connected with the care of the insane, that the proportion of recoveries is in direct ratio to early treatment, that it seems unnecessary to discuss this topic.

Scarcely a week passes without the intelligence in the newspapers of some suicide or homicide, arson or other crime, committed under the impulse of what is termed "temporary insanity," and in too many cases it is evident, not only to medical men but to general readers, that the perpetrator should have been treated as of unsound mind and the crime thereby prevented. I may here remark upon the enormous amount of crime directly caused by the unthinking and extremely injudicious manner in which accounts of terrible crimes are detailed and sensationalized in many of the newspapers: we know how some persons will dwell upon the most horrible particulars of any tragedy they may become aware of until they form the idea they might be actors in similar scenes, and how the thought once entertained is frequently succeeded by a repetition of the deed which originated it. Psychologists will not be surprised if the recent massacres at Pantin and at Wood Green are imitated in other places. If records in the newspapers, circulating amongst our poor and criminal classes, were confined to the fact of any particular crime having been committed, no details being given of the mode in which they had been perpetrated, much crime would be prevented; unfortunately, the insertion of the details insures a large sale.

Those who study insanity and have intimate relations with its victims know how fearfully strong are the impulses under which deplorable and—very often—preventable acts are committed, and many have borne record in their writings of the frequency of such morbid motives. Some of those who suffer from dangerous ideas have a most lively horror of them and wish to be prevented from obeying them, but the present state of our English law does not permit the reception of such persons into asylums unless certificates of lunacy and other documents have been previously signed, or unless they have been certified patients in some asylum

within five years ; it is only in asylums that I believe such individuals can be treated safely. (As I shall presently explain, the Scotch law differs from the English). I entertain the strong conviction that if our laws were modified to permit the admission, under due restrictions, of such persons as voluntary patients when certificates cannot be obtained, and that if the amended law were made known, many of them would enter asylums and place themselves under discipline and treatment, on account of the feeling of intense relief they would experience on having avoided the temptations to which they were subject, and the knowledge that while under supervision they would be free from danger to themselves and others. It frequently happens that when it is considered advisable to place a member of a family or other friend in an asylum there is a prejudice on the part of the patient that family ties or friendly feelings have been loosened, if not ruptured, and much bitterness of spirit and heartburning, not to speak of enmities, have been caused, to last, perhaps, as long as the patient lives. In numerous other cases those interested in the mental invalids have felt the strongest antipathy against taking any steps for their security, on account of the natural dislike to subject them to any curtailment of their personal liberties, the cognisance of the evil feelings sometimes aroused, the moral and legal responsibility of the procedure and, in too many cases, the prejudice still existing against asylums, but which is now, happily, subsiding, because it is known asylum care and treatment are characterised by humanity and an advanced stage of medical knowledge, and that a close supervision is, very properly, maintained over all asylums for the insane by the authorities appointed by the government. If the voluntary system of admission into asylums were extended many of the difficulties I have mentioned would be lessened or abolished.

I have termed the liberty of the subject a "popular bugbear" because it is so well protected by existing legislation, if fully carried out—as it is by the Commissioners in Lunacy—that little or no abuse of it can occur without the knowledge of the authorities ; unless, indeed, it is in religious houses, in hydropathic establishments or in the case of patients kept without payment or at home. The recent prosecutions by the Board of Lunacy have proved very beneficial with regard to single patients for whom payments are made. It seems fairly open to serious consideration whether commissioners should not be appointed to inspect all the inmates

of monasteries and convents, and all houses into which dipsomaniacs are received, and whether the Commissioners in Lunacy should not be supplied, under heavy penalties, with the names, addresses, and other particulars of all insane persons in residences out of their present jurisdiction. While freely admitting the general excellence of religious communities, and the great advantages of hydropathic establishments, I think it is questionable whether some of their inmates are not—more or less—of deficient mental power, sufficient to bring them and their properties within the care and protection of the State, and whether they should not be thrown open to the authorities in the same manner as lunatic asylums are, instead of being, practically, uncontrolled. But this is a digression, for which I hope to be excused on account of the importance I attach to its subject.

Let us now examine the various systems of legislation pertaining to voluntary patients. And, first, let us take that of England.

Until 1853 no person could be received into a licensed house as a boarder, and such houses were consequently closed to all but patients.* In the Lunacy Act of that year,† provision was made that any patient discharged from a licensed house might be retained in it as a boarder if the previous assent in writing of two of the Commissioners had been obtained; and also that a relative or friend of any patient might, by means of a similar assent, be received therein as a boarder. This was for the benefit of patients who had been, or were, certified, and the period of residence as boarder or companion was specified in the assent, which the Commissioners could extend or revoke. It will be noticed that the object of a patient's relative or friend residing in an asylum was for the sake of companionship and consolation, and was not intended as any advantage to the mental health of the companion. Up to that time boarders of any kind were unknown in any institution for the insane, and it will be observed that a person, under the Act of 1853, could not be admitted into a licensed house as a voluntary patient for his own mental infirmity, but that its enactments were limited to him who was either resident at the time in the house, or who had a friend willing to be his companion there.

* Definition of "Patient," see Appendix.

† 16 & 17 Vict. c. 96, s. vi. Fry's Lunacy Acts (1864), p. 322.

By the Lunacy Acts Amendment Act of 1862,* superintendents of licensed houses are permitted to receive as boarders those who have been patients in any asylum within five years immediately preceding, if the assent, which is granted for a specified time, of two or more Commissioners or Visitors have been previously obtained. This was a great improvement on the previous Act; but it continues to shut out from licensed houses and public asylums all those who, though feeling the advisability of asylum treatment, have never been certified. Registered hospitals† for the insane have a great advantage over licensed houses and asylums in this respect, that those who wish to reside in them may do so.‡

The enactments regarding boarders apply only to licensed houses and to registered hospitals, so that the poorest, who perhaps have more need to become voluntary patients than those higher in the social scale, are debarred from entering English asylums—*i.e.*, public pauper asylums—unless they are received as certified patients.

Writing of hospitals for the insane the Commissioners have thus expressed themselves §—

“It would appear advisable to render admission into them less difficult, if not in every case, yet at least in those where the patients suffer from sudden and uncontrollable impulses to commit violence or suicide, and who desire to place themselves under care and treatment. But besides persons of unsound mind, for whose medical care and treatment hospitals are primarily intended, it has occurred to us that it would be very desirable if arrangements were made for the reception therein of persons, of whom we have reason to know there are many, not insane, who, being conscious of a want of power of self-control, or of the addiction to intemperate habits, or fearing an attack or a recurrence of mental malady, and being in all respects free agents, are desirous of residing as voluntary boarders in an institution for the insane.”

If it be desirable, as it most assuredly is, to facilitate the admission of the persons described by the Commissioners in the above extract into hospitals, surely it is no less to be

* 25 and 26 Vict., c. 111, s. xviii. See Appendix, 2.

† Definitions of “Licensed House,” “Asylum,” “Registered Hospital,” in 8 and 9 Vict., c. 100, s. cxiv. See Appendix, 3.

‡ See Case and Opinion in Appendix, F (p. 107), 17th Report of Commissioners in Lunacy, 1863.

§ 17th Report of Commissioners in Lunacy, 1863, p. 12.

wished that similar privileges may be extended to licensed houses, and to county, borough, and other public asylums—to affluent, middle-class, and pauper boarders, as well as to hospital ones. It may be urged that the admission of paupers as boarders into asylums would increase public asylum expenditure but, irrespective of the fact that the plan is actually adopted in Scotland, I am satisfied it would be cheaper to their counties or boroughs to admit them when they wish than to wait until they require certification, or have committed some illegal act. A suggestion made by the Scottish Commissioners, in their Report for 1861 (p. xxxvii), with regard to paupers liberated on trial, may be introduced here, as bearing on this point. It is that "It would be advisable, in the cases of paupers, to retain the patient's name on the poor-roll during the period of his probation, and also to grant him a liberal alimentary allowance, with the view of securing his continued proper care and treatment and consolidating his convalescence. We are satisfied that statutory authority, to enter into arrangements of this kind, would be followed by important benefits to the patients. The knowledge that the means of subsistence were secure for a certain period would enable them gradually to resume the duties of life, and would tend to protect them against a relapse which, under existing circumstances, not unfrequently takes place, and often leads to suicide." I bring forward this generous and enlightened suggestion because it appears only reasonable to suppose that when such amenities are proposed by Commissioners in Lunacy for the benefit of certified patients, they would not have any objection to very poor persons, who wish to become voluntary patients, being placed on poor-rolls, and their names being kept on them for a time after discharge. It should be considered also that boarders in public asylums would partly, if not in some cases entirely, repay their expense by their labour.

Having considered the English, I propose now to indicate the Scotch legislation concerning boarders. It will save time if I mention the enactments now in force, without describing the previous ones.*

By the Lunacy (*Scotland*) Act, 1866,† persons who are desirous of submitting themselves to treatment, but whose mental condition is not such as to render it legal to grant certifi-

* 25 and 26 Vict., c. 54, s. vi., Lunacy (*Scotland*) Act, 1862.

† 29 and 30 Vict., c. 51.

cates of insanity, are admitted as boarders into Scotch asylums—public as well as private—if they have previously written to the Commissioners and have obtained the written assent of one of them, subject to provisions that such boarders must be seen by the Commissioners at each visit; that unless the boarder becomes a patient he cannot be detained more than three days after giving notice of his intention or desire to leave; and that notices of admission, discharge, or death shall be sent to the Commissioners as in the case of patients. Also, that in the event of such boarders becoming patients, the certificants must not be in any way connected with the asylum. Nothing is specified concerning the duration of time granted by the assent, the renewal, or the revocation of it.

Under the existing state of the law there is a reluctance to receive boarders into Scotch asylums, in consequence of the want of control, and therefore of benefit in many cases. Of dipsomaniacs as voluntary patients the Commissioners have reported * “The chief impediment is the want of the power of compulsory detention. It is undeniable that much mischief is caused to the health of the individual affected, and to the property and comfort of his family, from the irresistible tendency to the abuse of stimulants, and the question of legalizing compulsory control, where such a tendency exists, is one in favour of which powerful arguments may be advanced. At the same time it is not desirable to bring mere drunkards within the scope of the lunacy laws; and there will frequently be a difficulty in determining where vicious indulgence ends and disease begins.”

In Ireland there are not any enactments respecting boarders in asylums, and their reception therein is consequently not recognised by law. In two or three instances within a period of, perhaps, ten years persons have been found residing voluntarily in licensed houses by the Inspectors of Lunacy—who correspond to our Commissioners—but no objection has been made, the Inspectors being satisfied that no restrictions were placed on the freedom of egress of such residents whenever they wished. In at least one of the public asylums relapsed patients sometimes seek re-admission voluntarily, and they are received and treated like the other inmates.

Previous to 1838 † voluntary patients could be admitted into asylums in France, provided they were received into a

* 10th Lunacy Report, 1868, p. lxv.

† Loi de 30 Juin, 1838.

special department, in which they would be kept free from contact with any of the insane; but in that year the permission was revoked, because it was found so inconvenient: under it the boarders could go out or leave at any time, however seriously affected, and any benefits derivable from asylum residence were therefore illusory.

As some proof of the necessity for legislation in England for those who wish to become boarders I may mention that the number in Scotland of those admitted, who voluntarily sought admission, was in 1864 twelve, of whom eight were received as boarders, and four as patients; in 1865 eight, of whom three were admitted as voluntary residents; in 1866 fifteen voluntary patients were received; in 1867 seventeen, fourteen of whom were received into public, and three into private asylums; and that last year the number rose to thirty-one—making a total of eighty-three in five years. My esteemed teacher and friend, Dr. Skae, has recorded in his reports of the Royal Edinburgh Asylum, at Morningside—from which I wish I had time now to give many valuable extracts*—that in 1858 he received three applications from persons entreating to be admitted; in 1859, four; in 1860, one; in 1861 and 1862, several; in the year 1863 a considerable number, of whom three were admitted as voluntary residents; in 1864 eight applications were made, and in 1865 several; and that in 1866 ten were taken to the asylum at their own request, or went seeking admission, and of these five had previously been inmates. He received other applications in 1867 and 1868. This is the experience of only one superintendent, and demonstrates how large a number seek admission in Scotland. It should, however, be considered that some went from other countries. Were the Scotch system extended to the other portions of our empire there is little doubt the number of voluntary applications for admission would be considerable; and I believe that if the scheme I suggest were adopted it would be very large. I base this assumption on the proportion of the populations to the countries: Scotland has a comparatively small population, but we have found her asylums received eighty-three voluntary patients in five years, and that the number is progressively increasing. At present persons desirous of obtaining asylum protection, and who have never been patients, have to

* Royal Edinburgh Asylum Reports for 1858, p. 25; 1859, p. 19–21; 1860, p. 22; 1861, p. 15; 1862, p. 18; 1863, pp. 14 and 17; 1864, p. 18; and for 1865, p. 16.

go to Scotland for it. During the past two years I have received applications respecting voluntary boarders ; three persons were admitted, having been former patients, the others could not, because they had never been certified. I expect to hear many English superintendents receive similar and numerous applications, and also have to decline them.

I believe the old adage that "prevention is better than cure" is as true of mental as of physical morbid conditions ; that many a case of absolute certifiable insanity could be warded off by the early treatment of unhealthy symptoms, and that when opportunities occur for checking them we should, and ought to, have the means of placing the sufferer under the most favourable conditions for recovery. I do not pretend to affirm that all persons with over-wrought mental energies require rest in an asylum—far from it; but I do think that when such persons wish to enter asylums they should be free to do so. There is something very calmative and beneficial to the disturbed mind in a well-managed asylum ; the regularity and routine, discipline and order, presence of skilled attendants, the means for amusements and exercise, the absence of exciting causes, are in themselves sufficient for the recovery of many of the inmates ; while voluntary patients know they are free agents, and have confidence that all will be done that can be to restore them to health.

With regard to dipsomaniacs Dr. Symonds, the President of the Social Science Congress at Bristol, has this month read a paper on "Proposed Legislative Prevention of Drunkenness," and for argument assumes that a drunken man is in an unsound state of mind, and should be guarded from evil to himself and others as much as a lunatic. He proposed a resolution, which was carried with but one dissentient, viz. : "That dipsomaniacs should be liable to deprivation of liberty, with a view to their protection and reformation." Were any enactments made legalising such deprivation, there can be little doubt many persons would voluntarily enter asylums in preference to being sent to them, and as it seems probable we must soon provide retreats for oinomaniacs, it becomes a question of some moment whether we should not enable their managers to detain those confided to their charge.

Professor Gairdner believes that in intractable cases of drunkenness "the person of the drunkard might be placed under restraint in properly-regulated establishments, like the 'inebriate asylums' of America, under State inspection and

control." Many arguments could be advanced in favour of this suggestion, and I think a strong one is that if all dipsomaniacs—*i. e.*, all those who labour under uncontrollable impulse to alcoholic excess—were deprived of liberty, there would be a considerable diminution of hereditary tendency towards mental and physical imperfections : moral and intellectual idiocy and insanity, epilepsy and allied disorders, criminality and intoxication on the one side, scrofula and tuberculosis, rachitis and chorea, neuralgic and other nervous affections on the other. The appointment of a commissioner to visit and report upon the American "inebriate asylums" would be productive of much valuable information to our Government, and would probably be succeeded by important results.

I have endeavoured to prove the extent and the deficiency of legislation respecting boarders or voluntary patients in asylums and other establishments for the insane, and to point out the necessity for its enlargement, and wish now to indicate the mode in which I would suggest its amendment.

Let there be one system of lunacy law for all the divisions of the British dominions. "There are no less than forty-one acts affecting the insane subjects of Her Majesty in England and Wales."*

Confining my remarks to legislation on boarders, I would urge that—

1. It may be lawful for the proprietor or superintendent of any establishment—whether asylum, hospital, or licensed house—for the reception of lunatics † to receive and keep in such establishment as a voluntary boarder any person who shall express a desire, in writing, addressed to the proprietor or superintendent, to become a boarder, ‡ without any certificate or assent being previously obtained.

2. Every such boarder shall be produced to the Commissioners in Lunacy, or Visitors, at each statutory visit.

3. The superintendent or proprietor shall, within twelve hours of verbal or written notice from any boarder, furnish such boarder with a form of notice of intention to leave, § and shall permit him or her to leave on the day named in such notice.

* 22nd Report of the Commissioners in Lunacy (England), 1868, p. 90.

† As defined by 8 and 9 Vict., c. 100, s. cxiv. See Appendix, 1.

‡ Appendix. Schedule A.

§ Appendix. Schedule B.

4. The superintendent or proprietor shall send notice* to the Commissioners or Inspectors of Lunacy, to the District Board of Lunacy in the case of asylums and hospitals, and to the Clerk to the Visitors and to the Medical Visitor in the case of licensed houses, within twenty-four hours of the reception of any boarder.

5. The superintendent or proprietor † shall enter the reception of all boarders in a reception book to be kept for such purpose, and send notice of leaving, with state and address of the boarder, or of death, to the authorities mentioned in the last paragraph, the same as for certified patients.

6. The superintendent shall send a statement of the condition of every boarder to the Commissioners or Inspectors of Lunacy at the expiration of every three months from the reception of such boarder.

7. The Medical Visitor shall see every boarder in a hospital or licensed house, free from the superintendent, medical assistant, or proprietor, within three days of reception ; the fee for such visitation to be paid by the boarder.

8. A boarder entering a private asylum may make arrangement as to payment with the proprietor or superintendent, who shall be able to enforce such payment to him by law. A boarder entering any other establishment for the insane may agree to pay such sum, in whole or in part, as may be agreed upon between him and the managers thereof; when he or she can only pay in part the balance shall be charged upon the common fund of such establishments. In the case of pauper patients the payment shall be made by the parish to which he or she belongs, and shall be of the same amount as for patients. (This may be objected to by some ratepayers, but I believe it will be found wiser to charge parishes with the maintenance of boarders than to run the risk of such persons becoming patients, and therefore, by reason of commission of crime, medical certificates and other expenses, proving more expensive.)

It would be better, whenever a boarder may be certified and so become an ordinary patient, that he should be transferred to another asylum—that he should not be admitted at all as a patient into any asylum into which he had gone as a boarder—unless he expressed a strong wish to remain.

* Appendix. Schedule C.

† The last pages of the existing "Admission Book" would suffice for this purpose ; or the receptions might be entered with the admissions in red ink and without numbers, to distinguish them.

It may be thought I take an extreme view of the importance of persons being able, of their own will, to enter asylums for treatment of incipient or slight or latent attacks of mental disorder, but when we reflect that 2,000 suicides occur annually in Great Britain, and that very many of them are preventable, it is but just to suppose that, were asylums thrown open in the manner I have indicated, and with the precautions against abuse I have suggested, some of the persons with suicidal tendencies would become boarders and so have their lives saved and, instead of being losses to society and to the State, be gains to them by recovering from their abnormal conditions and resuming their previous positions in the world. If we assume only a few suicides would thereby be annually prevented it would be matter for sincere congratulation and comfort. Those who have studied insanity in its various forms know these arguments apply as strongly to homicides as to suicides, and that the homicide frequently becomes the suicide, as is but too often proved by newspaper reports. While I have been writing this paper the country has been horrified by the poisoning of a fondly-loved wife and four children, and of the poisoner; such cases excite no surprise in the psychologist, because he knows that those who are most attached to their kindred during mental health are the most likely to destroy them, and often themselves also, if their minds lose their equilibrium.

We read almost every week of some person having committed homicide or suicide, or both, and the evidence before the coroner frequently proves that the culprit had been of altered manner and behaviour before the commission of the act, but had not been deemed sufficiently insane to justify removal to an asylum. It is my firm belief, supported by personal knowledge, that some of those persons would voluntarily enter asylums if they knew they could be received on simply going to them and asking to be admitted, stating their reasons. If asylums were thus assimilated to general hospitals, more real and general knowledge of them would spread amongst the public, existing vulgar prejudices would consequently be destroyed, and great benefit would result to the partially insane as well as to the mass of asylum inmates. At present there is a lamentable amount of ignorance throughout the general public regarding asylums and the treatment pursued in them, and it is therefore much to be wished that it were commonly known how the inmates are treated, and what liberties and advantages they enjoy ; then

those who have left asylums would be humanely treated out of them as in them, and the sensitive convalescent would not be taunted and viewed with suspicion by those about him, and no stigma would attach to him, because it would be known that in many cases physical debility or disease has caused the appearance of mental symptoms instead of the more ordinary signs of corporeal disorder.

In conclusion, I wish to protect myself from those who may think I urge an extended system of boardership in asylums from interested motives; my objects are to alleviate suffering, diminish danger, and protect valuable lives, and my endeavour has been to show how boarders could be received into all classes of institutions for the insane in all parts of Great Britain, if not throughout the British empire; for I know no sufficient reason why the scheme I have sketched out could not be adopted in India, Canada, Australia, and all other of our possessions. That I am not unduly prejudiced in favour of asylum superintendents, but that the subject has been regarded from the public point of view also is, I venture to hope, proved by the precautions I have outlined against any abuse. Many, no doubt, will think that in all cases a medical certificate of the boarder's mental condition should be obtained, but it is not required in Scotland, nor do I deem it necessary or advisable, because the majority of those who seek asylum treatment only manifest their true state by their own perceptions, and are consequently in such a condition that nothing conclusive can be certified of them; besides which, the giving of any certificate would place the certificant in a very painful position with the boarder: further, I do not suppose any person would attempt to become a boarder in an asylum unless he felt he required treatment and rest in one.

APPENDIX.

1. Definition of Patient (8 & 9 Vict., c. 100, s. cxiv.). "Every person received or detained as a lunatic or taken care or charge of as a lunatic." Definition of Lunatic. "Lunatic shall mean every insane person, and every person being an idiot or lunatic or of unsound mind." *Fry's Lunacy Acts*, 1864, p. 305.

2. Op. cit., p. 509. "It shall be lawful for the proprietor or superintendent of any licensed house, with the previous assent in writing of two or

more of the Commissioners, or in the case of a house licensed by justices of two or more of the visitors, to entertain and keep in such house as a boarder for such time as may be specified in the assent any person who may have been within five years immediately preceding the giving of such assent a patient in any asylum, hospital or licensed house or under care as a single patient."

3. Definitions of "Licensed House," "Asylum," and "Registered Hospital," Vide 8 & 9 Vict., c. 100, s. cxiv. "'Licensed House' shall mean a house licensed under the provisions of this Act or of some Act hereby repealed for the reception of lunatics." (2 & 3 W. IV., c. 107; 3 & 4 W. IV., c. 64; 5 & 6 W. IV., c. 22; 1 & 2 Vict., c. 73; 5 Vict., c. 4; 5 & 6 Vict., c. 87). "'Asylum' shall mean any lunatic asylum . . . for the care and maintenance of pauper and criminal lunatics in England." "'Hospital,' shall mean any hospital or part of an hospital or other house or institution (not being an asylum) wherein lunatics are received, and supported wholly or partly by voluntary contributions, or by any charitable bequest or gift, or by applying the excess of payments of some patients for or towards the support provision or benefit of other patients."

SCHEDULE A.

FORM OF WISH TO BECOME A BOARDER.

I, A. B., of *occupation*, desire to reside in your establishment as a boarder, and hereby agree to abide by any regulations you may impose on me, provided that I can terminate such boardship by giving you not less than three clear days' notice written of my intention to leave.

Dated this day of 18

A. B.

Witness, C. D.

To

Superintendent (or Proprietor) of

SCHEDULE B.

FORM OF NOTICE OF INTENTION TO LEAVE.

I, A. B., now a boarder under your supervision, hereby give you notice of my intention to leave your establishment, and to resume my perfect liberty on the day of 18. And I hereby exonerate you from all responsibility and consequences respecting such cessation of your supervision over me.

Dated this day of 18

A. B.

To

Superintendent (or Proprietor) of

SCHEDULE C.

FORM OF NOTICE OF RECEPTION OF BOARDER.

I hereby give you notice that A. B. of *(occupation)* was received into this establishment as a boarder on the day of 18, and I hereby transmit a copy of the request on which he was received.

Dated this day of 18

E. F.

Superintendent (or Proprietor) of

To the Commissioners in Lunacy.

OCCASIONAL NOTES OF THE QUARTER.

Lunacy and Lunatic Asylums in France.

A marked feature of the present century is the extent to which provision has been made for the care and treatment of the insane. The first of our Scotch asylums was erected towards the close of last century at Montrose; and now, in accordance with law, every county is bound to take steps for the accommodation of its insane poor. The consequence has been that the number of insane in asylums has increased from hundreds to thousands, while, strange to say, the demand for additional accommodation continues as active as ever. In fact, it is a physical truth that, as regards asylums, nature abhors a vacuum; and, accordingly, no sooner is one completed than the question for its enlargement comes up for consideration. Nor is this the case in Scotland alone. The same phenomenon is seen in England and in France. To what is this owing? Not, we imagine, to any increase in the growth of lunacy, but in a great measure to humanitarian legislation—to Poor Laws and Lunacy Laws—and in some degree to the requirements of modern life, which render the presence of a lunatic, however harmless and inoffensive, much more in the way than formerly in the family circle.

By the French Law of Lunacy, the law of 1838, as *par excellence* it is called, every department of the empire is called on to provide accommodation for its insane poor, either by the erection of an asylum or by agreement with the proprietors of existing establishments. For many years, however, the accommodation in the Department of the Seine has been quite insufficient to meet the demands for admission, and it has accordingly been necessary to send a large proportion of its patients to asylums in other departments, frequently at a great distance from Paris. Hence arose not only much inconvenience and expense to the department, but great hardship and distress to individuals through the separation of the patients from their families. To remedy the evils consequent on this state of matters, the Prefect and General Council of

the Department of the Seine determined on a grand scheme of asylum extension. In addition to the accommodation already existing in the Bicêtre and Salpêtrière, it was calculated that twelve new asylums for 600 patients each would be required. But although a modest commencement was made with three, that of St. Anne, within the Octroi of Paris, and those of Vaucluse and Ville Evrard, a few miles distant from the capital, experience has already shown that the original proposal is impossible of accomplishment. With the erection of the three asylums named, the funds at command have been exhausted, with so small an amount of relief that the evils consequent on the removal of the patients to distant localities continue in almost as great force as before.

Why the scheme failed it is not difficult to see. The plan on which the new asylums have been built is certainly very simple, but at the same time very expensive. The patients are accommodated in detached blocks or pavilions, each of which is of two storeys, and is calculated for fifty patients. The principal entrance and the staircase of each pavilion are in the centre. On one side, on the ground floor, is the day-room, and adjoining it the dining-room or refectory; on the other side is a dormitory, with, at its extremity, a lavatory and attendant's room. Up stairs are two dormitories, each with its lavatory and attendant's room. Thus, three-fourths of each pavilion serves for sleeping accommodation, and one-fourth for day use. There are no passages or corridors; the rooms extend from wall to wall, and the beds are placed two and two between the windows. The other buildings consist of a block for the offices of the administration, the accommodation of the officers, and the visiting-rooms; of another, containing the kitchen, laboratory, store-rooms, concert-room, napery-room, &c.; of the chapel; the baths; the wash-house; the dead-house. All these various buildings are connected by covered ways. The male and female pavilions are placed on different sides of what may be called the neutral buildings; and each pavilion has its own airing-court and covered verandah.

The visitor to these asylums cannot fail to see much to admire; but he will be apt, on reflection, to ask himself whether the expenditure has not been unnecessarily lavish. In the first place, the pavilion system involves a vast extent of mason-work. In the next place, the internal fittings are of oak. The floors, the wardrobes, the shelving,

the lining of the walls, are all of this wood. At St. Anne's, the tops of the dining-tables and of the wash-stands are of marble; and all the beds, with the exception of a few for excited patients, have hair mattresses, with spring cushions and feather pillows. There are no benches; each patient has his chair; and in the dormitories there is a chair and night-table for every bed. Meals are taken in groups of eight or ten, who sit at tables furnished with glass carafes, tumblers, crystal salt and pepper dishes, earthenware plates, and knives and forks. The chapel is fitted up as is usual with Roman Catholic places of worship. The bath-house contains every variety of bath—simple, medicated, plunge, sitz, foot, douche, and Turkish; and great ingenuity is displayed in varying the manner in which the water is made to play upon the patient. The kitchen exhibits a great variety of cooking apparatus, all heated by steam. The napery-room contains vast piles of sheets, towels, and linen of all descriptions—five changes for each patient. The laboratory is furnished with the means not only of preparing medicines, but of conducting complicated analyses, and is under the charge of an officer whose knowledge of chemistry must necessarily be that of a master.

At St. Anne, there is, besides the airing courts, only a small extent of garden ground; but the asylum of Vaucluse has attached to it a farm of 370 acres, and that of Ville Evrard one of 700 acres. On the farms, matters are conducted in the same magnificent fashion, and it is said that the buildings of that of Vaucluse have cost nearly twenty thousand pounds. Judging from their extent, those at Ville Evrard must have cost even more; but it is extremely difficult to obtain reliable information on such points. Altogether, the cost of three asylums is stated to have amounted to twenty-two million francs, or £880,000; and for this sum accommodation has been provided for only 1850 patients—equivalent to an outlay of about £475 for each. But this average cost may perhaps be somewhat reduced by the erection, in connection with each of the three asylums, of a house for patients of the upper classes. At present, however, it is only at Ville Evrard that accommodation of this kind is being erected.

And now comes the question how far expenditure such as that we have described is justifiable. Much misconception exists in the public mind as to the power of medicine in insanity. By far the greater number of patients in asylums are

incurable. Many of them, moreover, have become insane, not through accidental disease or any mysterious visitation of Providence, but clearly through the vicious indulgence of their appetites or passions. Therefore many will ask—What claim have such persons on society to be cared for and pampered at a cost such as that just indicated? Much might well be sacrificed to restore a patient to sanity and usefulness; but when the mischief is irremediable, and moreover when the loss of mental soundness has had its origin in vice, is it just or reasonable to tax the community to provide for the mass of the insane comforts far beyond what are enjoyed by the majority of those who are compelled by law to find the requisite funds? It is not too much to say that in several important respects the patients in the new asylums of the Department of the Seine are better accommodated than travellers in French hotels—not even excepting those of the Rue de Rivoli.

Each of the new asylums, we have stated, accommodates 600 patients, but attached to that of St. Anne, or rather adjoining it, is a small separate asylum, containing 50 beds, to which all the patients of the Department must first be sent. Belonging to this asylum are two medical men whose sole duty it is to study the cases admitted, and to determine to which asylum they shall be sent for permanent treatment. Epileptics and paralytics go to the Bicêtre and Salpêtrière, and the more acute and curable cases to St. Anne, as the asylum most within reach of the students for clinical instruction. A characteristic feature of French asylums, generally, is the small number of their single rooms, which, besides, are always located in detached buildings. Thus, at Vaucluse, there are only three single rooms, or cellules, on each side; a proportion equivalent to but 1 per cent. of the patients under treatment, and one which to English eyes appears far too small for safety, comfort, and proper care. It, however, affords proof how much latitude may be allowed to a judicious superintendent in the style of accommodation. In connection with this point, it is worthy of notice that no shutters are provided to any of the windows except those of the cellules.

The heating of the asylums is mainly dependent on hot air or hot water, a stove or boiler being provided under each pavilion; but open fire-places are also occasionally used. At St. Anne gratuitous advice in mental and nervous diseases is given to external patients on certain days of the week by the medical officers.

As regards the condition of the patients, a vast improvement has been effected in the treatment of the inmates of these new asylums, in comparison with what was commonly seen in France at no very remote period. Personal restraint has been immensely reduced, while the excessive use of seclusion is prevented by the very nature of the accommodation. With more single rooms—that is, with increased facilities for the separation of incompatible natures—modern French asylums would take a place inferior in no respect to any in Europe. At present they afford a lesson in the manner of supplying physical wants which the superintendents of some of our home asylums might study with advantage. Patients condemned to sit by day on benches without backs or cushions, to sleep by night on hard-packed straw mattresses, and live from year's end to year's end on porridge, broth, and boiled beef, may well envy the lot of their fellow-sufferers in the asylums of the Department of the Seine. Extravagance is not necessary to insure comfort; and a little consideration and ingenuity are capable of going a great way in lessening the miseries of asylum life without adding to its cost.—*The Scotsman.*

Clinical Wards for Lunatics.

The medical officers of lunatic asylums frequently complain that the chances of recovery are very much diminished by the delay in sending patients into asylums. This delay is the result of several causes. There is, in the first place, a curious popular prejudice which seems to regard insanity as more than a misfortune or a grief—a disgrace to the family in which it occurs. Then, the machinery for procuring the admission of a patient is cumbersome and alarming to the popular mind. The detailed information given by friends, the certificates on soul and conscience by medical men, the frequent trouble in procuring the signature of the Sheriff—all these ordeals require so much preparation that valuable time is lost, and the acute disease has too often run beyond control. Again, many a permanent inmate of an asylum owes his unhappy state to the ignorance of his family physician. We must not be understood as reflecting on medical practitioners as a body; we rather point to a serious defect in the system of medical education, to which Dr. Laycock drew attention at a quarterly meeting in Edinburgh of the Medico-Psychological Association. Though there treated as a professional question, the public have a very direct interest

in the matter, if it should find on good evidence that health and money are squandered, both of which might be economised.

The Association wisely left the details as to the kind of hospital, the amount of wards, and even the character of medical examinations, for future adjustment when the examining boards should have been induced to insist on the clinical study of insanity as essential for their degrees. But it is not merely a question for licensing bodies. The celebrated Griesinger, of Berlin, asserts that there is enormous waste of money in the arrangements of existing asylums, that the cost of building is in excess of what is really required, and very much in excess, if it is considered that many of the chronic lunatics would be better off and happier if living outside of the barracks and monastic palaces to which they are now confined. This is one kind of waste; another is incurred when, by injudicious management at the hands of the physician, purely nervous ailments are aggravated into insanity, and brain diseases susceptible of cure are permitted to sink into that most melancholy of all forms of human degradation, hopeless insanity. Griesinger advocates the establishment of "psychiatrical cliniques," or hospital wards, for the treatment of cases of recent insanity, and his method is thus summed up in a recent number of the *Journal of Mental Science* :—

The distinctive feature of Professor Griesinger's proposal is that the instruction is intended to be given in an hospital, in the establishment of which the clinical teaching of psychiatry is regarded as an important object. Hence it is to contain *recent* cases; hence it is to be placed in connection with, or in the immediate neighbourhood of, a general hospital; and hence the medical charge is to be confided to a physician who shall also have wards in which diseases of the nervous system, uncomplicated with mental symptoms, can be treated. For the general medical practitioner it is of comparatively little moment whether he be acquainted with the treatment of chronic lunatics in asylums. Such *chronic* cases as he meets with require little or no medical attention; but he has frequently great anxiety and no little difficulty in the treatment of *recent* insanity. It is scarcely to be hoped that any arrangement would be successful in supplying suitable instruction unless it is to be given in the immediate neighbourhood of the other branches of the school. And we believe that the comparative failure of most recent attempts has arisen mainly from this defect. If this be correct, it is well worthy of consideration by those who are re-arranging and re-building clinical hospitals, whether wards should not be set apart for the treatment of insanity. That there is no ad-

ministrative impossibility we have seen: any legal difficulties ought not to be insurmountable.

On the admirable statement just quoted but little comment is needed. It proposes to put the treatment of the insane on the same footing as midwifery or the treatment of skin diseases, for it is a subject on which at the very threshold of his professional career the practitioner may be forced, as medical education is now conducted, to confess that his long and costly studies have given him no scrap of guidance. He may have learned the coarse general rule that nervous patients "ought not to be sympathised with," and if a healthy man himself he will be all the more disposed to believe in nothing less evident than a smallpox, less palpable than an ulcer. Of the great world of nascent disease, the insanity which is only foreshadowed by irritability, he knows, he can know, nothing: his sympathy is impossible. Now the treatment of cases on the border-land between mental and merely physical diseases in hospital wards, such as Griesinger proposed, would at once give experience useful every day of professional life, far more useful than the theories of maladies rarely seen or the surgery of unique injuries; would further—and this is the important point—help to break down the prejudice already referred to which multiplies our incurables for the sake of sparing for a time the vanity of friends. For the day is now past when mental diseases can be studied and classified as metaphysical abstractions. Griesinger (again to quote the reviewer already cited) "upheld that insanity is not a separate subject at all; that diseases of the nervous system may be complicated with mental symptoms, or may not be so complicated;" that therefore the student should not be obliged to read in one book or study in one place the history of purely physical diseases, in another book or place that of purely mental diseases. The cliniques already described were not theoretical plans of Griesinger. In the wards of the Charité at Berlin cases of nervous disease, either simple or complicated with mental symptoms, might be studied side by side, the care of both being in the hands of the same physician. Thus the student is enabled to follow the declension of one stage of disease to another; to learn the almost insensible links which inseparably connect the purely physical ailment with the well marked insanity. To break the series arbitrarily, and to declare that here the work of the ordinary physician ends, there the specialist's

interest begins, is, it has been well said, as wise as to separate breathing diseases from diseases of the organs of respiration. Further, the patient has the inestimable benefit of being in the hands of a man who knows at what point to change the plan of treatment, who knows to teach his pupils this important practical lesson. Gradually accustomed to the close association of bodily and mental ailments too, the public will learn to regard the latter as no more a discredit than inflammation of the lungs or a broken arm. Moreover, the passage from the one stage of disease to the other being under the same care, the transition is the less conspicuous, even the ultimate removal to an asylum will as readily be concealed from general knowledge as is many such an event under the present system. Again, the delay in sending patients to asylums operates injuriously in two ways; not only are they deprived for a time of appropriate treatment, but for a time, and that the most important in the whole disease, they are subjected to influences usually of the most injurious kind. The wards so successful in Berlin afford the best intermediate step between home and asylum treatment. The physician would know at what point to advise the removal of his patient, even were there not, as there should be, legal security that recent cases should not be detained beyond a certain period. Be it remembered that it is *recent* cases *only* to which our remarks refer. For the chronic lunatics other arrangements must be had recourse to. To retain them in ordinary general hospitals would be a retrograde step, both from the side of economy and from the medical point of view. It has been suggested that the admission of students to the wards would operate injuriously on the patients; but the objection, purely theoretical in this country, has been negatived by experience in Berlin; no evil results were observed, in some instances even positive benefit was derived. The evidence is, of course, not very extended; but the speculative objection has no better support than the assertion, often so rashly and unwarrantably made, that the clinical visit in the general wards of an hospital is injurious when made at a proper hour and under proper direction.

This subject has a special claim on attention just now, when a new general hospital is about to be erected under the shadow of the New College, Glasgow. We would urge on the founders of that institution, on the medical profession of the city, that the opportunity should be taken—an opportunity such as rarely presents itself—of very carefully consider-

ing whether there might not be introduced here a method of treatment and study new to this country. Since Conolly's efforts towards the abolition of restraint, no improvement has been urged so great as this. Its adoption would, we are convinced, diminish the increase of insanity, promote the comfort of the sufferers, and alleviate the heavy burdens on the public purse as well as on private benevolence.

The legal position of the suggested clinical wards cannot here be discussed. It is, moreover, closely connected with another question which it is impossible for the present to enter on. The inmates of lunatic asylums may be classified as recent cases of whose recovery there is reasonable hope—chronic cases which derive benefit from asylum treatment, and chronic cases which are beyond all possibility of alleviation. The disposal of the last and some of the second class of cases is still an unsettled question. Their detention in asylums, their confinement in poor houses, and their treatment on the cottage or family system have found and find their respective supporters. This subject also occupied the attention of the association, and to it we shall return.—*North British Daily Mail.*

Middle Class Asylums for the Insane.

The provision for the care and treatment of lunatics made by the State is for paupers only. Why this should be, it is difficult to find a satisfactory reason. Asylums meet a public want; and it has always appeared to us that it would be about as rational to limit prisons to the reception of pauper criminals, as it is to limit asylums erected with the public money to the reception of pauper lunatics. As it is, however, the wisdom of Parliament has decreed that the very classes which have found the money for the erection of our public asylums shall be excluded from the benefits they confer. Conolly made strenuous efforts to remedy the evils which flow from this omission, but found great difficulty in interesting the public in the matter. He had, however, the gratification of promoting by his influence the establishment of the Coton Hill Asylum, near Stafford, as a place of treatment for patients of the middle classes. Of such institutions there are several in England, but in far too insufficient number for the accommodation of the patients belonging to the independent classes, the greater proportion of whom are accordingly sent to private establishments, in which the cost of maintenance must be regulated by the necessity to provide an adequate profit for their proprietors. The English public

asylums for the middle classes have, like our own public asylums, been erected chiefly by means of contributions and legacies. The charitable portion of the community has thus voluntarily undertaken a burden which should have been borne by the whole nation. But this inequality becomes, in our opinion, an injustice when, as is a common practice, the surplus of the payments for some patients are taken to supplement the payments of others. There are few families in which the maintenance in an asylum of an insane member does not fall as a heavy burden; yet many families who can ill afford it make serious sacrifices to secure to the sufferer every possible advantage. To take part of the payments made under such circumstances to lighten the burden of others, is simply to make the miserable relieve the miserable; and even where there is no particular want of money in a patient's family, the principle of requiring higher payments than are requisite for his own maintenance, in order that benefits may be extended to others, appears to us to be simply fining a man because he had the misfortune to become insane. The proper course, in our opinion, would be to levy the requisite funds from the whole community by assessment.—*From a Review of Dr. Conolly's Life in "The Scotsman."*

The Case of Santa Nistri.

THE inquest on the body of a poor patient, SANTA NISTRI, who was admitted into the Hanwell Asylum suffering from general paralysis, and who died there after a fortnight from the effects of frightful injuries received in the asylum, has ended in a very unsatisfactory manner. The verdict of the jury was that death resulted from the injuries received in the asylum; but there was no evidence to show how they had been produced. Considering what these injuries were—that the breast-bone was broken; that the third, fourth, sixth, and seventh right ribs, and the fourth, fifth, sixth, and seventh left ribs were broken; that the chest was bruised; and that the left eye was very black and lacerated,—it is sufficiently plain that, however the event may have happened, the poor fellow was effectually crushed to death. It will require, too, we cannot but think, a faith not less than that which removes mountains, to believe that all this destruction could have been done without any attendant in the patient's ward or anyone in the establishment having the faintest notion how it occurred. The vague and lame story of the deceased having stumbled over a mat and fallen on the floor—

which one of the patients was produced at the inquest to tell —may be dismissed from consideration ; for, even if it were true, of which there seemed no little doubt, it would not satisfactorily account for the injuries. We are driven, indeed, by a study of the evidence, to one of two equally painful conclusions : either that the supervision and care of patients in the Hanwell Asylum are so grossly defective that injuries such as SANTA NISTRÌ died of may be inflicted without anyone knowing anything about the manner of their infliction, or that there has been a conspiracy of silence. The matter urgently demands, and will, we trust, immediately receive, from the Commissioners in Lunacy a further and more searching investigation. SANTA NISTRÌ's death is, unhappily, not a solitary instance : other patients have died in the Hanwell Asylum from the effects of similar severe injuries, as anyone may see who refers to the last Report of the Commissioners in Lunacy. It is therefore of the utmost importance that an effectual inquiry should be made into the strange accident by which ribs do get broken there, with a view to prevent them for the future, and to preserve public confidence in the management of our county asylums. We are aware that the Hanwell Asylum is not considered a good example of a public asylum, and that some men regard it as the opprobrium of our county asylums. It is much too large to be well superintended and governed, even under the most favourable circumstances ; and its present organization is notoriously such as to preclude rather than ensure successful management. The Committee of Visitors, with the best intentions, but with the worst results, jealously retain all the power in their own hands, and the medical officers are without the authority which they should rightly have, and which they have in most other county asylums. It is obvious that gentlemen who visit the asylum, and spend a few hours there occasionally, cannot possibly exercise the supervision and authority which are needed in an asylum at every turn and at every hour in the day ; and that while they keep the power in their hands, they cannot justly expect from their officers that full and deep sense of responsibility which those who have proper authority must feel. Power and responsibility ought to go hand in hand ; and if the Committee of the Hanwell Asylum take one they should take both. It would, we are confident, be a great and beneficial reform if they would re-organise the asylum on the plan of all well-governed county asylums, granting full power to the medical superintendents, and exacting a strict responsibility from them.—*The Lancet.*

PART II.—REVIEWS.

State of Lunacy in Great Britain and Ireland. 1868.

*The Lunacy Blue Books for 1868.**

I. England and Wales.

The Twenty-third Report of the Commissioners in Lunacy is dated 31st March, 1869. It is a thick volume of 408 pages, of which 107 comprise the report proper, the remainder forming the usual appendices, which consist of—

- (A.) The number of insane persons in asylums.
- (B.) Licences and change of proprietorships.
- C.D. Average weekly cost of maintenance in asylums and hospitals in 1868.
- (E.) Entries in visitors' books of county and borough asylums.
- (F.) The state of the Criminal Asylum, Broadmoor.
- (G.) Entries in visitors' books in hospitals.
- (H.) Entries at Fort Pitt and Yarmouth.
- (I.) Isle of Man Asylum. Report of Superintendent.
- (J.) Pauper lunatics and idiots not in asylums, &c.
- (K.) Workhouses.

* 1. Lunacy. Copy of Twenty-third Report of the Commissioners in Lunacy to the Lord Chancellor, (presented pursuant to Act of Parliament. Ordered by the House of Commons to be printed, 14th July 1869.

2. Eleventh Annual Report of the General Board of Commissioners in Lunacy for Scotland. Presented to both houses of Parliament by command of Her Majesty. Edinburgh : printed for Her Majesty's Stationery Office by Thomas Constable, 1869.

3. Lunatic Asylums, Ireland. The Eighteenth Report of the District Criminal and Private Lunatic Asylums in Ireland : with Appendices. Presented to both houses of Parliament by command of Her Majesty. Dublin : printed by Alexander Thom, 87 & 88, Abbey Street, for Her Majesty's Stationery Office, 1869.

(L.) Statistical tables, with a copy of entry made by Commissioners on a special visit to St. Luke's Hospital, and the reply of the Committee thereto.

The Report opens with the following summary showing the number and distribution of all persons of unsound mind in England and Wales under official cognizance on 1st January 1869, exclusive of 225 lunatics so found by inquisition, and residing with their committees :—

	Number of Patients, 1st January, 1869.						
	Private Patients.			Pauper Patients.			Total.
	M.	F.	Total.	M.	F.	Total.	
In County and Borough Asylums	107	118	225	12,227	14,415	26,642	26,867
In Registered Hospitals	995	944	1,939	207	206	413	2,352
In Licensed Houses	1,679	1,444	3,123	620	1,053	1,673	4,796
Private Single Patients	138	186	324	...	...	...	324
In Workhouses ...	...	...	...	4,899	6,282	11,181	11,181
Out-door Paupers	...	...	...	2,908	4,079	6,987	6,987
	2,919	2,692	5,611	20,861	26,035	46,896	52,507
In Naval and Military Hospitals...	209	...	209	...	...	...	209
In Criminal Asylum	330	74	404	45	12	57	461
Total	2,458	2,766	6,224	20,906	26,047	46,953	53,177

The following Table contains a summary analogous to the above in respect to each of the years from 1859 to 1869, both inclusive, showing the number of lunatics on the 1st January in each of those years, and, excepting as to the Broadmoor Asylum, distinguishing the private from the pauper patients :

From this Table the total number of lunatics appears to have advanced from 36,762 on 1st January 1859, to 53,177 on 1st January, 1869; the whole increase being 16,415, viz.: 1. Of private patients, an increase of 300 in Registered Hospitals; of 375 in Metropolitan Licensed Houses; of 45 in Naval and Military Hospitals; and of 202 in the class of single patients. On the other hand, there are reductions of 2 in County and Borough Asylums, and of 80 in Provincial Licensed houses: the nett result being an increase of 840 private patients. 2. Of pauper patients, an increase of 11,025 in County and Borough Asylums; of 197 in Registered Hospitals; of 3,218 in Workhouses; of 1,189, in the class of out-door paupers; forming an aggregate increase of 15,629, from which has to be deducted a decrease of 515, viz., 244 in the Metropolitan and 271 in the Provincial Licensed Houses, the nett increase thus being 15,114. 3. To which are to be added 461 criminal patients in the Broadmoor Asylum, which was opened in 1863. It thus appears that the number of lunatics, as far as our official records extend, has increased 45 per cent. during the decennial period ending 1st January last, and that 67 per cent. of this increase is attributable to additional pauper patients in County and Borough Asylums. The number of such patients altogether in these asylums appears to have increased 70 per cent.; of lunatics in Workhouses 40 per cent.; and of out-door pauper lunatics 21 per cent. The increase of private patients during the same period appears to have been altogether 17 per cent.

The next Table shows the proportion of the total number of lunatics to the population for each year, from 1859 to 1869 inclusive:—

Y E A R .	Population.	Total Number of Lunatics on 1st January.	Proportion to Population.
1859	19,686,701	36,762	1 in 536
1860	19,902,713	38,058	," 523
1861	20,119,314	39,647	," 507
1862	20,336,467	41,129	," 494
1863	20,554,137	43,118	," 477
1864	20,772,308	44,795	," 464
1865	20,990,946	45,950	," 457
1866	21,210,020	47,648	," 445
1867	21,429,508	49,086	," 437
1868	21,649,377	51,000	," 424
1869	21,869,607	53,177	," 411

The next table is very interesting, and shows the relative increase in the number of admissions of certified insane patients, as compared with the population:—

Y E A R .	Population.	Admissions during each Year (including Re-admissions and Transfers).	Proportion of Admission to Population.
1859	19,686,701	9,310	1 to 2,115
1860	19,902,713	9,512	," 2,092
1861	20,119,314	9,329	," 2,157
1862	20,336,467	9,078	," 2,240
1863	20,554,137	8,914	," 2,306
1864	20,772,308	9,473	," 2,193
1865	20,990,946	10,424	," 2,014
1866	21,210,020	10,051	," 2,110
1867	21,429,508	10,631	," 2,016
1868	21,649,377	11,213	," 1,931

The ratio of the number of admissions of certified insane patients to the population appears to have been 1 to 2,115 in 1859, and 1 to 1,931 in 1868; and the average annual increase of the admissions appears to have been about 2·04 per cent.: the average yearly increase of the population being estimated at about 1·11 per cent.

In the following table the proportion of deaths to the daily average number resident, and to the total number under treatment for each year, are placed in juxtaposition:—

The last Table shows the distribution of pauper lunatics upon the 1st January in each year as follows:—

Pauper Lunatics on 1st January.	Total Number of Pauper Lunatics.	Where Maintained.			Proportion per Cent. of the Total Number.		
		In Asylums, Hospitals, or Licensed Houses.	In Workhouses.	With Relatives or others.	In Asylums, &c.	In Workhouses.	With Relatives or others.
1859	31,872	18,021	7,963	5,798	56·70	25·06	18·24
1860	32,993	18,794	8,219	5,980	56·96	24·91	18·13
1861	34,381	19,723	8,543	6,115	57·37	24·85	17·78
1862	35,709	20,949	8,603	6,157	58·67	24·09	17·24
1863	37,611	21,998	9,208	6,405	58·49	24·48	17·03
1864	39,190	22,939	9,710	6,541	58·53	24·78	16·69
1865	40,076	23,763	9,756	6,557	59·30	24·34	16·36
1866	41,548	24,995	9,973	6,580	60·16	24·00	15·84
1867	42,943	25,998	10,307	6,638	60·54	24·00	15·46
1868	44,876	27,363	10,684	6,829	60·97	23·81	15·22
1869	46,896	28,728	11,181	6,987	61·26	23·84	14·90

From these statistics we learn that the average per centage of recoveries to admissions during the past ten years, has been for county and borough asylums, 33.93; registered hospitals 40.00; metropolitan licensed houses 27.60; provincial licensed houses 32.07; naval and military hospitals 18.49; criminal asylums, 6.49; private single patients 8.85.

Taking the figures as they stand, an advantage of country over the metropolis is at once indicated.

The contrast between the recoveries of county asylums and registered hospitals is more apparent than real, as registered hospitals often admit only picked cases, while the county and borough asylums are required to admit all. And, again, the cases sent to county and borough asylums, too frequently have been allowed to become chronic and incurable by too long a residence in the workhouse wards, while the cases admitted into registered hospitals are for the most part recent. As regards the naval and military hospitals the average is certainly low, while of the criminal class, considering them from a purely psychological point of view, the average may even appear high.* Of the single patients the average certainly is high, considering that, as a rule, the patients are hopeless and confirmed lunatics before they come under official notice.

The average of deaths to the daily average numbers resident during ten years was 10.31 per cent, while with reference to the total numbers under treatment, in the course of the year, it was 7.80.

The report then proceeds to advert to the condition of the several public asylums in England and Wales, reporting what has been done to increase and improve, or otherwise affect, the accommodation for pauper lunatics. With but few exceptions, the visiting Commissioners' entries are of a favourable character, and the cases of fatal injuries and of suicide must be considered surprisingly few, and such as to reflect credit on the department. Still, however, the Commissioners very justly consider that the number of these cases may be further diminished, and they more especially refer to those instances where it has been discovered, after death, that patients have died from the effects of broken ribs, and a question has arisen as to whether the injuries were inflicted prior or subsequent to admission.

* The bulk of them belonging to that border class, in which often it is impossible to draw the line between Criminality and Insanity.

It was with a view to the removal of doubts in such cases that the Commissioners, in 1866, issued a circular addressed to Committees of Visitors, suggesting that a stringent rule should be made to insure the personal examination of every patient by the medical superintendent immediately on admission. The adoption of this rule, they say, was at first strongly resisted in several counties; but although they have frequent evidence that it is still very imperfectly carried out, it has happily rendered the occurrence of these cases less frequent. Nor can it be too often repeated, write the Commissioners, that the only effectual safeguard against failures of justice is that every patient, on the day of admission into the asylum, shall, *irrespective of the existence of bruises or of pulmonary disturbance*, be examined by one of the medical officers, with the stethoscope, and with the utmost care practicable, so as to enable him to make a record in the case book at the time, not only as to the condition of the lungs and heart, but also as to whether the chest is free from injury. The advisability of this advice is so obvious that we believe it only requires to be thoroughly known to be acted on.

New asylums are in course of erection, or about to be commenced for the city and county of Hereford; for Lancashire, at Whittingham, six miles to the North East of Preston; for South Yorkshire, at Wadsley Park, near Sheffield; for the boroughs of Norwich and Bury St. Edmunds (combined), and for the boroughs of Ipswich and King's Lynn, (combined).

At the Derby asylum a new chapel is in course of erection to accommodate 300 patients, and at an estimated cost of £1,516.

The sanction of the Secretary of State has been given to plans for the enlargement of the Three Counties Asylum, so as to provide additional accommodation for 70 male, and 110 female patients, at a cost of £12,095. Notwithstanding the additions already made at the Essex asylum the continued pressure for accommodation has rendered a further enlargement necessary, and in June last the Secretary of State's approval was obtained to plans for a new detached block capable of receiving 248 female patients, at an estimated cost of £21,000, and also for an enlargement of the laundry department, the estimate for which, together with the necessary fittings and machinery, was £2,000.

At Lincoln a new chapel has been erected, and the old one turned into a dining and recreation hall. Although it is little more than four years since the Glamorgan asylum was opened

for the reception of patients, additional accomodation has for some time past been urgently needed ; plans were submitted to the Commissioners in September last for the erection of a detached block of building for 120 male patients, at an estimated cost of £5,700, and also for new wards in connection with the laundry, for 36 females.

Additional provision is being made at the Norfolk asylum for 52 patients ; at the Wandsworth asylum by the addition of 60 single rooms ; by the erection of a detached building at the Warwick asylum, capable of holding 100 patients of each sex ; by alterations at the Bristol asylum providing for 16 men and 21 women, &c.

In their twenty-first Report, the Commissioners described the steps which had been taken to provide temporary accommodation for the insane poor of the Isle of Man pending the erection of the new asylum. The building was completed early in the past year, and they publish in the Appendix (I.) a report addressed by Mr. Hingston, the medical superintendent, to the committee of management. Considering the short time the institution has been opened, and the unfavourable character of many of its inmates, its condition is very satisfactory ; and it is gratifying to be assured that proper provision has thus at length been made for the pauper lunatics of the island, who have so long suffered from much neglect and mismanagement.

The formidable dimensions the annual increase of lunatics has assumed, and the pressing want of additional asylum accommodation, particularly in the county of Middlesex, has become the subject of the grave consideration of the Commissioners, and has elicited some strong comments from them. Notwithstanding a contract for the reception of 60 patients at Hayward's Heath, 661 applications for the admission of patients into Hanwell had been refused in less than twelve months. In nearly the same space of time there were no fewer than 562 refusals for the admission of Middlesex patients into Colney Hatch.

The Report says—

“Upon this state of things the Visiting Commissioners remarked strongly in their entries. They found upon enquiry that the plea for inaction relied upon by the magistrates was what they described as the necessity of waiting ‘until it could be ascertained to what extent the Asylum clause of the Metropolitan Poor Act might prove to be available for supply

of the desired accommodation ;' and the Commissioners took occasion immediately to point out that 'no provision of the kind required would be found practicable under these clauses, which had a special and quite other object in view.' "

Whatever may have entered into the consideration of the magistrates, and whatever construction may be put upon their temporizing, it is certain that the conclusion upon which they based their course of action was not illogical, for if the new asylums in process of erection under the Metropolitan Poor Act relieve the workhouses of 3,000 poor law imbeciles, it may be argued that much of the workhouse accommodation thus afforded may be occupied by lunatics. This, however, would be in direct contravention of the act of parliament, and is only justifiable upon the emergency which ought to have been provided against. The fundamental error in carrying out the provisions of the County Asylums Act was the computation upon which they were constructed, provision only, as a rule, having been made for the numbers at the time in workhouses and in licensed houses, and little or no provision having been calculated for increase of numbers. Upon completion of the buildings the patients have been removed to these asylums, which they have filled, and being placed in the best hygienic conditions of course enjoy prolonged lives, while new cases soon fill up the vacancies in the licensed houses and union houses; in which latter especially numbers of otherwise recoverable cases become chronic from the absence of the appliances and comforts of the county asylum.

As far back as 1866 the pressure for ordinary asylum accommodation in Middlesex had been confessedly so urgent that a committee was appointed to consider and report thereon, but all efforts of the Commissioners failed to induce action on the part of the magistrates, who continued to wait to try the experiment of the district asylums, notwithstanding the "clear and decisive" statement of the Poor Law Board that these asylums were to provide for such harmless and imbecile cases only as could by law be retained in workhouses. At length the Commissioners reluctantly reported to the Secretary of State for the Home Department the condition of the lunatic poor of the county of Middlesex. They relate :—

This report was made on the 30th of last November ; and at the meeting of the magistrates on the 21st of January in the present year

deputy clerk of the peace laid before the Court a communication from the Home Office, dated the 5th of that month, in which it was stated that Mr. Secretary Bruce, having regard to the entire inadequacy of the existing asylums of the county of Middlesex for the accommodation of pauper lunatics, was compelled to call upon the magistrates of the county to take proper steps for remedying that evil, and that, in default of their doing so, it would be his duty to consider whether he should not put in force the peremptory power given to the Secretary of State by the 30th section of "The Lunatic Asylums Act, 1853."

Under this extraordinary pressure for accommodation, and to provide somewhat for some of the intensely urgent cases of the overwhelming numbers of recent or acute maniacs in the workhouses, the suggestion was made, and the proposal agreed to by the Committees of Colney Hatch and Hanwell, to exchange chronic for acute cases—an expedient, however, which the Commissioners themselves condemn as depriving many regarded as fit inmates of asylums of all the protection of the lunacy laws, by placing them without any such protection under the irresponsible care of guardians of workhouses.

Some of the cases illustrating the condition of the 1494 lunatics in the workhouses of Middlesex are among the most appalling that can be imagined, and had they been reported by any other than the Commissioners would hardly have gained credence. Thus:—

At Clerkenwell workhouse, in February, one patient was found suffering from acute suicidal mania, with a self-inflicted wound in the throat; another was discovered so violent, that restraint by means of a strait waistcoat both by day and night had to be resorted to. In March, at the St. James' Workhouse, the Visiting Commissioners discovered in the dark bedroom of an objectionable insane ward, long since condemned as unfit for its purpose, but still in use in consequence of the pressure caused by 726 ordinary inmates in the house, an insane female in the charge of a woman of 90 years of age. In May, the Commissioners visiting the Poplar Workhouse found, not only a man just admitted who had refused food, and had not eaten anything for several days, but another man, who had been for some time in the house restrained by straps in bed in a single room in the lunatic ward, having numerous bruises on various parts of his person. In Chelsea workhouse was a female inmate who suddenly became violent and dangerous, and who had struck the pauper nurse violently with a pewter pot, had rushed at her with a knife, had thrown her down and jumped upon her; and yet no asylum could be

found for this patient. A Commissioner visiting Stepney Workhouse in May reported, that a young woman was still in that house who had been attacked with acute mania in the previous December, when, under the influence of a delusion that she was bewitched by her mother, she obtained some vermin poison, mixed it in a pasty for the family dinner, and was detected just in time to prevent the accomplishment of her purpose. She defended the act to the Commissioner, telling him that, having failed to induce the police to interfere in stopping her mother's foul acts, she thought herself justified in putting a stop to them herself by the means resorted to : yet, nearly a month after the visit, the guardians informed the Poor Law Board that this woman was still in the workhouse "solely by want of asylum accomodation."

It is needless to multiply cases; those quoted are sufficient to show some of the privations to which the lunatic poor of Middlesex are subjected, not from want of desire on the part of the guardians of the various parishes to afford the full protection of the laws to which pauper lunatics are entitled, but from the inadequacy of the provision to meet the requirements of the Acts of Parliament. It is easy to understand the virtuous desire of the magistrates not to increase the county rates. But since both their county asylums are full, and since all metropolitan licensed houses also are full, as well every available space obtainable in the asylums of other counties and the provincial licenced houses, and yet 1,465 patients remain with a right to accommodation,—the moral obligation of rendering to each his due ought to overbalance the idea of a present economy which will probably only involve increased expense hereafter.

Over thirty-one pages of the Report are specially devoted to the 15 lunatic hospitals distributed in various parts of the country, and in which 1938 lunatics were resident on the 1st of January last.

We cannot but feel, as strongly as the Commissioners express their belief, that the great want of the present time is hospital accommodation, in which the insane poor of the middle classes may be treated at rates of payment within their means. It is a fact that numbers of patients who properly should be in pauper asylums, obtain free admission into some of these hospitals, to the exclusion of the poor members of the educated class, who, in numberless instances, would be able to afford a small sum weekly towards their maintenance.

So inadequate (say the Commissioners), is the charitable aid afforded to this class by all the hospitals at present erected, that the

pauper asylum is the only resort for them, and daily increasing numbers are sent there as ordinary paupers, the parishes being partly, or in some instances, wholly reimbursed for their maintenance.

To such an extent is this practised in county asylums, as to be frequently a matter of formal complaint by the visitors, imposing, as it is argued, a burden on the ratepayers which they are not legally called upon to bear. To the patients themselves also it is no less a hardship and injustice; and painful cases are constantly coming under our observation in which persons of education and social position, clergymen, barristers, medical men, and others who from reduced circumstances are unable to meet the lowest charge at which admission can be obtained into licensed houses, are, as a last resource, driven to associate with paupers.

Few have greater claims upon the sympathies of the public than the poor of the middle classes, and yet perhaps they are the recipients of the least amount; and too often their share,—certainly as regards the insane members of that class,—goes to the pauper while they are left to sink into the degradation of pauperism. The existing accommodation in lunatic hospitals is perhaps sufficient for present requirements of the insane numbers of the poor sections of the middle class, but what is needed is that the space should be restricted to this portion of the community; and it would be advantageous if some separation could be made between the acute and the chronic and imbecile cases.

The Report further asks the Lord Chancellor to consider the question of the law relating to the property of lunatics. Not only is some great diminution necessary in the expense of an inquisition, but legislation is absolutely called for as to the safe custody and ultimate restoration of money and property, or valuable articles not seldom found on the persons of lunatics.

One patient was found to have a deposit note for £400 in her pocket, another had £170 in bank notes and gold, a third lady had £30 in cash, and a fourth in passing through a London workhouse had £86, which the guardians have taken, and although the patient has been discharged, refuse to refund; because as she is still considered insane, she cannot give a receipt satisfactory to their board.

The commissioners remark—

What on the whole appears to us essential is, that some intermediate and easily applied protection should be found, limited in its character and procurable as well as terminable without undue difficulty or expense

for the property of persons who have been placed under certificates of insanity whether in public or private asylums, which would secure them analogous advantages to those enjoyed by chancery patients.

We are inclined to hold that upon few questions would legislation be more easy, but the first step towards protection would certainly be to deprive boards of guardians of the power of enforcing charges of maintenance against already impoverished families, while a father or mother, or sister or brother might be made a responsible and legal custodian of whatever little the lunatic might possess.

The Commissioners conclude their report with an account of a special inquiry into a case of alleged neglect and ill-treatment of a lunatic, residing with his brother and sister at Rye. The case is altogether of so much importance, that we make no apology for publishing the account of the Commissioners *in extenso*. Pursuant to the instructions of the Board, two of the Commissioners, on the 18th December, visited the house and examined the lunatic.

The following was their report:—

The room occupied by the lunatic was a small one on the first floor. Upon the door being opened the smell was most offensive. Upon an old four-post bedstead crouched the lunatic, his knees bent up to his chin, and his legs on his thighs. He was covered over with the bedclothes, but otherwise naked, and for 20 years he had not worn any article of clothing, or been out of doors. He took no notice of the Commissioners' entrance, and, when spoken to, showed no intelligence, and sat immovable. At first they doubted whether his limbs were not permanently contracted, but his brother, bringing some bread and cheese, took him by the arm and asked him to get up. He did so without resistance, and walked to the corner of the room, and resumed his crouching posture on a piece of board, and commenced eating the bread and cheese. The bed, which was of straw, was wet, and the case much soiled and black from having been constantly wetted. Some pieces of sacking which were placed on the bed were also dirty and offensive. He got up and walked to the bed without apparent difficulty, and got into it, and resumed his former position. Although able to stand and walk, his body was bent, and he seemed unable to straighten himself. The upper part of his person was clean, as were his legs and feet, but his buttocks and thighs were covered with excrement. He appeared to be free from any positive disease, but he was pale and almost anaemic in appearance, and very thin, and the Commissioners had no hesitation in attributing this state to his having insufficient food, and to the mode of life he has led for so many years. Until within the last six years, as they were informed by his brother, he occupied the adjoining and much larger room, from whence he was removed because of his violent and destructive propensities, breaking the furniture and tearing his bedclothes. He had never, since 1849, worn clothing of any kind. He had not, for six years past, been visited by any medical man. He was 51 years of age. His first attack of insanity, which was sudden, was in 1835, when he was sent to Bethlem Hospital, from whence, after 18 months, he was removed to Peckham House for a year. He has ever since been confined in the present house, first under the charge of his father, who died in 1852, and from that time of his brother. After his removal from Peckham House, he was, no doubt, violent and destructive, and

quite unfit to be at home. At that time he was under his father's care, and at one time he was so dangerous, that the window of his bed-room was boarded up; it was, as stated to us, unsafe to go near him, and his food was placed on a chair near the door. For several years he had been tractable and harmless. He was, as the Commissioners were told, under a settlement, owner of two freehold houses, yielding a net rent of £30 per annum, received by his brother, who owned the house in which the family resided.

The Visiting Commissioners stated, as the general result of their visit, that, although the treatment of the lunatic for so many years had been highly reprehensible, they did not think that any proceedings against his brother for ill-treatment or neglect were called for. At the same time they reported that, in their opinion, the lunatic was not, and could not, in existing circumstances, be properly cared for, and that proceedings ought forthwith to be taken, under the 68th section of "The Lunatic Asylum Act, 1853," for his removal to the county asylum.

Adopting these views, the Board communicated with the relieving officer, calling upon him to take the necessary proceedings under the provisions of the section referred to.

In reply, the relieving officer stated that he had visited and made inquiries respecting the lunatic, and that his brother, who appeared to be in circumstances to keep him, would be very reluctant to part with him, and did all he could to keep him well fed, comfortable, and cleanly. He enclosed a certificate by the medical officer of the workhouse, dated the 8th January, to the effect that he had that day examined J. G. C., that he considered him an imbecile, that he appeared in good health, and that "his habits were filthy, and required great care in cleanliness."

We continued to press for proceedings; and, in a letter of the 9th January, pointed out to the relieving officer the penalty he had already incurred by omitting to discharge his duty.

In reply, the relieving officer stated that he had, on the 10th, laid the case before two magistrates at Rye, whose clerk would write to the county asylum for the proper form of admission, and that the case would at once be seen and inquired into.

On the 27th January, by direction of the Board, a letter, signed by the Chairman, was addressed to the Mayor, expressing great surprise at the delay in removing the lunatic to the county asylum, and inquiring what difficulty had arisen in carrying out the recommendations of the Board.

The Town Clerk, by direction of the Mayor, forwarded to the Board a copy of Reports by Dr. A., and his brother, a surgeon, and stating that the Mayor thought those reports fully justified the magistrates in refusing their consent to the lunatic's removal, and adding, as a further reason, that "no evidence whatever could be obtained of want of proper care."

Dr. A.'s Report, as respects the personal condition of the lunatic was of a comparatively favourable character, and appeared to show that improved arrangements had been made for his care. In reference to his health, Dr. A. reported that, "though it had been extraordinarily good he showed symptoms of general debility and prostration of vital power coming on."

In confirmation of this view of the case, Dr. A. and his brother, on the 26th January, certified that, "taking into consideration J. G. C.'s impaired health, and the debility increasing every week, they were of opinion that his life would be jeopardised and imperilled, and in all probability his death accelerated by his being transferred to Hayward's Heath, or any other asylum."

All this, in our judgment, only tended to prove the injurious effect of his long and close confinement, and want of proper comforts and sustentation.

Having regard to the special circumstances of the case, we thought it desirable that the lunatic should be further examined by Dr. Robertson, the experienced Medical Superintendent of the Sussex County Asylum, who accordingly, under the authority of your Lordship's order, visited him on the 4th of February, and made the following report:—

"Hayward's Heath, 4 February, 1869.

"I visited this patient to-day at his house in Watchhill-street, Rye.

"I found him lying in bed in a larger room than he had previously occupied, and which was fairly furnished. The sheets and bedding were clean, and had been recently changed. He lay on his back, apparently unconscious of external objects. His face was pale and eyes sunken, and the whole body much emaciated. There was a threatened appearance of bed sore on the right hip, evidently from the effects of the urine and faeces that he usually passed in bed. He had on a flannel under-vest. The heart's action was rapid and feeble. The pulse was quite 120 in the minute, and intermittent two or three times. The lungs and heart gave under the stethoscope no evidence of disease. I attribute the emaciated condition of the patient, and the feeble irregular action of heart, solely to want of sufficient food and stimulants. I believe a change to the county asylum would materially improve his condition, and I think that with care this removal may still be accomplished; but no great delay should occur, as he is evidently gradually losing ground.

"(Signed) C. L. ROBERTSON, M.D."

Dr. Robertson, after his visit to the lunatic, had an interview with the Mayor and another magistrate, who refused to accept his views of the chances of his improvement at the asylum, and adhered to their opinion, and their determination not to sign an order of removal.

J. G. C. died on the 20th of March, the immediate cause being, as stated, exhaustion after diarrhoea. We subsequently, however, casually ascertained that, a short time before his death, he one night accidentally fractured his thigh.

We entertain no doubt that, if this poor lunatic had been duly sent to the county asylum, he would have derived great benefit from the care and treatment which he could there alone have received, and that it was plainly the duty of the authorities of Rye to take the necessary steps for that purpose. So satisfied was Dr. Robertson as to the good which, even in the enfeebled state in which he found the lunatic, he would derive from asylum care and comfort, that he offered personally to superintend his removal to Hayward's Heath.

In reference to this case we have only to add that, in our opinion, it strongly illustrates the expediency of making further provision for the protection and care of lunatics, not paupers, by vesting in us, as commissioners in lunacy, the power (which we possess in the case of paupers) of ordering the removal to asylums of lunatics not under proper care and control, or cruelly treated or neglected by their relatives or others.

II. Scotland.

The Eleventh Annual Report of the General Board of Commissioners in Lunacy for Scotland is a considerable volume, containing 310 pages, of which 68 constitute the report proper, and contain numerous statistical tables. The remainder consists of valuable and interesting appendices.

The number and distribution of the insane in Scotland, on the 1st January, 1868, exclusive of unreported lunatics maintained in private dwellings from private sources, appear in the subjoined table:—

Table showing the number of patients under official cognizance in Scotland, on the 1st January, 1868.

Mode of Distribution.	Male.	Female	Total.	Private Patients.			Pauper Patients.		
				Male.	Female	Total.	Male.	Female	Total.
In Royal and District Asylums	1920	1954	3874	463	461	924	1457	1493	2950
In Private Asylums	214	287	501	88	146	234	126	141	267
In Parochial Asylums	185	252	437	...	...	...	185	252	437
In Lunatic Wards of Poorhouses	226	344	570	...	...	...	226	344	570
In General Prison ...	31	14	45	...	...	...	31	14	45*
In Training Schools for Imbeciles	46	33	79†	33	22	55	13	11	24
In Private Dwellings	671	878	1549	13	15	28	658	863	1521
Totals.....	3293	3762	7055	597	644	1241	2696	3118	5814

From this table it appears that of the 7,055 insane persons under official cognizance in Scotland on the 1st January, 1868, 1,241 were maintained from private sources, 5,769 by parochial rates, and 45 at the expense of the State; the corresponding numbers of the 1st January, 1867, being a total of 6,887, of which 1,221 were maintained from private sources, 5,621 by parochial rates, and 45 at the expense of the State, being an increase of 168, or 20 private and 148 pauper patients, the number of patients in the lunatic department of the Central Prison at Perth remaining the same, though the return shows an increase of three females, balanced by a decrease of three males.

Of the unreported insane, maintained by their friends in private dwellings, no certain figures have been obtained. They are estimated by the Commissioners at about two thousand, almost all of whom belong to the classes little removed from pauperism.

Among the subjects of general interest entered upon by the Scotch Commissioners, and illustrated by their valuable statistical tables, is the question of the increase of lunacy,

* These are State Patients.

† These are not certified as Lunatics.

as viewed from the comparison of unrecovered removals of the pauper and private classes :—

The difference in ratio of removals of unrecovered private and unrecovered pauper patients, depends chiefly on social causes, and little, if at all, on any peculiarity in the form of mental malady. When the cost of maintenance is defrayed from private sources, and especially when the family of the patient is in straitened circumstances, a powerful inducement is held out to remove him from the asylum as soon as all hope of recovery is passed, or the malady has assumed a manageable form. On the other hand, when the cost of maintenance is defrayed by the parish, the pecuniary motive to removal ceases to operate, and as the family of the patient, as well as the inspector of the poor, are relieved of all trouble and responsibility in connection with the case, as long as the patient remains in the asylum, a considerable inducement is, on the contrary, held out to leave him there. The consequences of this state are every day assuming an aspect of greater gravity; and it can scarcely be doubted that, from the unnecessary detention of many patients in expensively conducted establishments, the burdens of the ratepayers are heavily increased.

The Commissioners annex a table, compiled from the reports of the English Board for six years, from 1862 to 1867 inclusive, showing the striking proportion of private patients discharged unrecovered over the pauper classes similarly circumstanced. And although we admit willingly the broad principle, yet we must notice two apparent sources from which error may arise, as regards the conclusion drawn from English statistics:—1st. Some of the private cases shown in the table as discharged uncured were inmates of hospitals, and admission into Bethlehem and St. Luke's Hospitals is only, as a rule, granted for one year, at the end of which time the patient is discharged as unrecovered, unless recovery shall have before occurred; whereas, in county and borough asylums, it is rare for a case to be discharged not recovered, except at the request of friends; while in both cases, but especially with regard to registered hospitals and licensed houses, a large number of cases must be reckoned as transfers. 2dly. The inducement in England to be relieved of the expense of maintaining a lunatic in a registered hospital or licensed house, as also of the responsibility and trouble of maintaining the patient at home, is counterbalanced by the requirements of the English unions generally, that the relatives of the lunatic shall either themselves become paupers, or consent to contribute a weekly sum towards the patient's support.

The Commissioners, passing on to the consideration of the actual cause of insanity, give the subjoined table, showing the increase of private and pauper patients in the asylums of England during the five years 1863—67:—

YEARS.	Total Number of Pauper Patients at 1st January.	Increase during the Year.	Total Number of Private Patients at 1st January.	Increase during the Year.
1862	20,949	.....	5250	.....
1863	21,998	1049	5340	* 90
1864	22,958	960	5327	— 13
1865	23,763	805	5177	—150
1866	24,995	1232	5277	*100
1867	25,998	1003	5286	* 9
Increase in 5 years .	.....	5049	.....	362

The report goes on to say—

The population of England may be estimated in round numbers at twenty millions, of which one million are paupers; and we have thus the remarkable fact of an increase in the number of asylums patients in five years of 5049 from the million of paupers and of only 36 from the nineteen millions of non-paupers. Making very liberal allowance for the pauperising effects of lunacy, and the consequent removal of a considerable number of patients from the independent to the pauper class, we are thus forced to the conclusion that insanity is essentially a disease, not of the overstrained intellectual or emotional faculties, but of the depraved bodily condition which, for the most part is dependent on insufficient or inappropriate food, irregular living, overcrowded dwellings, long continuous nursing, overwork, fever, or any similar cause of bodily debility.

Hitherto our efforts have been mainly directed to the provision of asylums for the cure and care of the insane; but these efforts, however beneficial they may be in many respects, have, as we have seen totally failed to arrest the increase of lunacy. That more successful results

would be obtained from the rational education of the people, and from the introduction into schools of physiological instruction, may very reasonably be expected. The prevention of insanity is not only a far nobler aim than the provision of accommodation after the mischief has been done, but it is one which there is reason to hope would greatly contribute to sap the sources of pauperism.

The Commissioners have compiled with their report a most valuable paper on the subject of "Establishments," from which we transcribe the following :—

It has already been shown that the number of parochial patients in asylums is steadily on the increase, apparently uninfluenced either by the statutory provision, which declares that in no case shall the sheriff's order remain in force longer than the first day of January first recurring after the expiry of three years from the date on which it was granted, or than the first day of January in each succeeding year, unless the medical superintendent of the asylum shall certify to the necessity or propriety of the continued detention of the patient; or by that which authorizes parochial boards, by a minute at a duly constituted meeting, to direct the discharge of patients chargeable to their parishes, if not certified as dangerous by the medical superintendent. In several foreign countries the precautions taken to guard against the unnecessary detention of patients in asylums are much more stringent than those in operation in Great Britain. In the Canton of Geneva, for instance, the authority on which a patient is sent to an asylum is not valid for more than six months; at the expiry of this period it may be renewed on application by those interested, to the lieutenant of police, accompanied by a report by the medical superintendent of the asylum or by any other medical man whom the police officer may select. After the expiry of eighteen months, the authority for detention is renewed from year to year according to the same forms; but in the event of anyone objecting to the transmission of a patient to an asylum, or to the renewal of the order for his detention, the College of Syndics is authorised, on appeal being made to it, to enquire into the case; and is empowered, for its guidance, to consult with a commission of experts, composed of three doctors of the faculty of medicine of Geneva. Whether such regulations tend to restrict the patients accommodated in the asylum to those who could not with propriety be otherwise disposed of, it is difficult to determine; but as at 1st January, 1867, the patients of all classes in the asylum of the canton did not exceed 111, in a population of 82,876,* it is probable that they exercise some influence in this respect. Be this as it may, it is doubtful whether regulations of the kind described could be conveniently acted on in large communities.

* De l'Aliénation Mentale et du Cretinisme en Suisse, par le Docteur L. Lunier. Paris, 1868 ; p. 102.

At the same time, however, it is evident that the risk of unnecessary transmission and detention becomes greater in proportion as the area from which the patients are drawn is extended, and as they are accumulated in large numbers.

It is generally admitted that a certain proportion of the insane may very properly be placed in private dwellings. After two or three years' asylum treatment, the chance of recovery becomes so small that the inducements to continue detention on this account may be said to cease. The inducements which remain for consideration are the risk of violence either to the public or to the patient himself, by removing him; and the possibility of his suffering from being transferred to circumstances less conducive to his comfort and happiness. No doubt the bedding, clothing, and diet of asylums will usually be better than those to which the peasant or the labourer has been accustomed at home; but to set against this, our statistics show that the circumstances in which the chronic insane are placed in private dwellings are by no means unfavourable to their physical health. Indeed, the rate of mortality among the insane who are so disposed of is lower than among any other class.

It is a common argument in favour of asylum treatment that the patients are under the persistent care of specially trained attendants. These advantages are unquestionable; nevertheless, in many cases of chronic insanity, there is in reality less necessity for constant supervision than in such diseases as consumption or dropsy. Indeed, for a very large proportion of the chronic insane nothing more is required from the attendant than ordinary tact and kindness, which will perhaps be found more readily in the cottage than in the asylum. To suppose that by mere transference to the wards of an asylum, a ploughman, policeman, discharged butler, old soldier, or mechanic or artisan out of work, is to become a devoted attendant on the insane, is simply to expect impossibilities. Nor, on the other hand, is it much to be feared that the kindness and humane treatment which, in the cottage of the ploughman or the dwelling of the artisan are extended to the sufferers from consumption, paralysis, or blindness would fail in the cases of those affected with chronic insanity. And in favour of cottage treatment, there is this great advantage, that male patients are not, as in asylums, deprived of the watchful care and tenderness of female nurses.

In large asylums, generally, it is too frequently the case that the demented patients suffer not perhaps so much from being inadequately clothed or fed, as from not receiving that degree of individual attention that would be extended to them in smaller communities. No sufficient efforts are made for their occupation and exercise. In this respect large asylums are real evils, but under the present system all asylums have the tendency to undergo this process of deterioration, simply because the admissions, as an invariable rule, exceed the discharges and deaths.

In an ordinary hospital the incurable patients are, after a time, removed ; but in an asylum they are allowed to accumulate, and the consequence is that they now constitute fully nine-tenths of the inmates. Hence the wards of every asylum are encumbered with mindless cases, totally incapable of deriving any benefit from the costly appliances designed for the treatment of those whose minds are deranged or perverted without being extinguished. That the removal of hopelessly demented patients would prove a boon to asylums is undoubted. Ordinary care and attention is all that they require ; and if precautions were taken to remove only patients in whom active disease had ceased, there is no reason to fear that any evil consequences would ensue.

We cannot but concur with the Commissioners that the yearly demand for more asylum space, and the increasing expenditure for the cost of maintenance, by reason of the overcrowding of the asylums with chronic imbeciles, is an injustice to the ratepayers, and that if the district boards were empowered to require the removal of patients after a certain period of treatment, on obtaining certificates from any two medical men approved by the General Board, that they were incurable, and not likely to prove dangerous either to themselves or to the public, room would be made for new cases without compromising the interests of humanity and without unnecessary expenditure.

With a view to eliciting the opinion of those who in Scotland have the charge of the asylums upon the value of asylum treatment, the Commissioners issued a circular inviting the medical superintendents to express their independent judgment, as formed from their own observation in the asylums of which they have the management.

Nearly all the papers are suggestive, and some of them of value ; but most of them enter upon questions which can be decided only by general and not limited experience.

Fourteen pages are devoted to the dietary tables of the various public asylums, which are striking at first glance, not so much because oatmeal and milk are the prominent principal articles of consumption, since these are simply in accordance with the custom and habit of the country and people, but from the almost entire absence of stimulus or alcoholic liquors. The Commissioners themselves, on this subject, remark that it is a question worthy of investigation.

The condition of the asylums generally was satisfactory, and the report, beyond being an exceedingly interesting, is a highly valuable and instructive volume.

III. *Ireland.*

The Eighteenth Report of the Inspectors of Asylums for Ireland is an interesting blue book, containing very carefully compiled statistical tables, in addition to concise statements of the condition of the various institutions which are under their surveillance.

The admissions into the Irish asylums, exclusive of transfers, were 2,171, or 848 in excess of the average of the ten previous years; of these, however, 362 were relapsed cases. The recoveries were $41\frac{1}{2}$ per cent. upon the total admissions, including 272 transfers, or 45 per cent. upon the fresh admissions. The death rate was as small as 7·44 per cent., and only three cases are recorded as suicidal or accidental. The returns show a total increase of 368 lunatics, without taking into account the numbers known to be at large.

The following table shows the number and their distribution on the 31st Dec., 1868, as compared with 31st Dec., 1867:—

Table showing number and distribution of patients in Irish Asylums on 31st Dec., 1868, and the comparison of the number and distribution of patients on Dec. 31, 1868, with Dec. 31, 1867.

	1868	1867	Increase.	Decrease.
In Public Asylums	5,816	5,212	604	—
In Private ditto	632	626	6	—
In Gaols	53	334	—	281
In Poor Houses	2,742	2,705	37	—
In Lucan, supported by Government.	49	51	—	2
In Central Asylums for Criminal Lunatics	162	158	4	—
Total Number of Registered Lunatics.	9,454	9,086	651	283
Lunatics at large	6,564	6,564	—	—
	16,018	15,650	—	—

From which it appears that there was the large afflux of 604 patients in the District Asylums. The Inspectors remark :—

This is not however attributable to any marked increase in the number of the insane generally, but chiefly to the fact that additional accommodation on an extended scale has been made available by the opening of the new asylums established at Ennis and Enniscorthy, and the provision of an auxiliary to Richmond by the temporary appropriation of a portion of the female prison at Grangegorman to lunatics belonging to the latter district.

The table which we have compiled shows also a decrease of 281 patients confined in gaols in the previous year; which number also has gone to the sum of the patients in District Asylums.

The new powers of the magistrates also have assisted in swelling the numbers in the District Asylums. The Inspectors on this head say :—

The operation of the Act 30 & 31 Vic., c. 118, has also contributed materially to crowd the District Lunatic Asylums with patients—magistrates, we regret to say, giving the widest possible interpretation to the term, “Dangerous Lunatic;” in fact, from the numbers committed by them during the year, as contrasted with the numbers committed to gaols annually, previous to the passing of this Act, they appear to consider every lunatic brought before them as “dangerously insane,” and issue a warrant accordingly for their reception into the asylum of the district.

The Inspectors animadvert strongly upon the operation of this Act, the more so since the warrants issued under it are mandatory, and peremptorily require admission for any case, whether fit or unfit for asylum treatment, to the exclusion, should the asylum be full, or nearly so, of all the recent or ordinary cases which more properly have a right to the benefit of the asylum treatment.

In the year 1867, under the provisions of 1 Vic., c. 27, and 8 & 9 Vic., c. 107, 634 patients were admitted as dangerous lunatics. But in 1868, under the new Act, no less than 979 persons were committed by magistrates as dangerously insane, fully one half of whom were harmless, idiotic, or imbecile. And so peremptory indeed are the orders of the magistrates, that the medical officers are obliged to take in the cases at any hour of either day or night, without any previous notice whatever, and whether or not there is accommodation.

The Inspectors state :—

It not unfrequently happens that an asylum is disturbed at midnight, while a violent patient shouting and vociferating in a paroxysm of insanity has to be provided for; the inmates are aroused from their rest; a disturbance is created throughout the entire establishment, and the patients are excited in a manner that may be injurious to them.

This is a condition of affairs that certainly calls for immediate legislation. Immediately upon the passing of the Act the Commissioners foresaw the evils that were likely to result from the new powers vested in the justices, and in expressing their concurrence as to the propriety of the measure, as regarded the abolition of committal of lunatics to gaols, made the following statement in their Seventeenth Report :—

What is to be feared is, that they (the justices) will consider nearly every case of lunacy brought before them as a fit one for committal; and we know by our own experience, under the 1 Vict., and 8 and 9 Vict., that parties bringing lunatics before justices have found no difficulty in depositing to facts sufficient to give a colour to the case, even though the individuals might be perfectly harmless, and thus secure their committal as "dangerous."

Of the 979 persons committed upon the warrant of justices of the peace, some were blind, some crippled, some helplessly paralyzed, and some deaf and blind, with great debility, and the report instances one case of a man conveyed in *articulo mortis* over thirty miles to the Ballinasloe Asylum as a dangerous lunatic.

Notwithstanding, however, the general defects of the Act and the inconveniences resulting therefrom, it seems evident that much of the present difficulty might be avoided by the exercise of some amount of discretion in the administration of the new law.

In the report upon the condition of a great number of the district asylums, the want of space and sufficient accommodation was mentioned as a very pressing need; and especially as regards sleeping room, the limited cubic space, almost as low in some cases as three hundred feet for each person, is found to be a serious evil, which can only be remedied by structural alterations and additions.

The general condition, however, resulting from care and management, was on the whole very satisfactory.

J. T. D.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

1. *German Psychological Literature.*

By JOHN SIBBALD, M.D. Edin., Medical Superintendent of the District Asylum for Argyllshire.

Allgemeine Zeitschrift für Psychiatrie, Vol. xxv.-xxvi., 1868-69. "The Theory of Hallucination," Prof. Hagen: "Grey Degeneration of the Spinal Cord in its Relation to the Psychoses, especially to Dysphrenia sexualis," L. Kirn; "Atrophy of the Optic Nerve in Insanity," H. Wendt; "Eleven Theses concerning Delirium Acutum," Schüle; "Observations on Temperature in Tetanic Spasms in Insanity, and on Elevation of Temperature after Death," E. Guntz; "Contributions to the Pathology and Pathological Histology of the Brain and Spinal Cord," Schüle; "Mechanical Restraint in the Treatment of the Insane," Stolz; "On the Prognostic Significance of Inequality of the Pupils," Nasse; "A Form of Mania with Great Depression of Temperature," Löwenhardt; "Observations on the Pulse in Insanity," Wolff; "On the Locality of Emotion, or the Functions of the Cerebellum," Prof. Jessen; "On the Specific Gravity of the Brain in Insanity," Nasse; "The Action of Papaverin in Insanity," C. Stark; "Description of a Case of Obstructed Development of the Brain," Schüle; "Contribution to the Casuistics of Enostosis of the Clivus in Insanity," Stahl; "The Prognostic Significance of Hereditary Predisposition in Insanity," v. Krafft-Ebing; "Clinical Significance of Dysphagic Affections," Zenker; "Dual Perception, and Dual Thought," Huppert.

Hallucinations.—Professor Hagen adheres to the usual definition of hallucination, excluding from consideration both illusion and delusion; and he regards it as consisting in a high degree of excitability in the nervous centre, in consequence of which stimuli which act upon it call into action the functions of the sensory nerves passing out therefrom, in a centrifugal direction and in an unusual and violent manner, generally quite independent of voluntary control. Such a condition affecting the motor nerves being termed convulsive, the author defines hallucination as convolution in the sensory nerves. He traces the causes and modes of occurrence of different kinds of hallucination, and shows the analogy which may be made out between them and convulsive con-

ditions. Especially he draws attention to the much more frequent occurrence of both states in anaemic than in plethoric individuals. He directs special attention to its independence of intellectual disturbance when considered in its proper and restricted sense. Out of much which he brings forward in support of this view we may extract the notice of a very interesting case reported by Professor v. Graefe. "A man past middle age had four years previously lost his sight in consequence of inflammation of both eyeballs. At the time when he came under observation the eyeballs were atrophied, and contained several calcareous deposits. He had become subject to extraordinary sensations of light, which annoyed him day and night, and interfered with his falling asleep. Half a year ago he had suffered from a severe emotional shock, since when the appearances of mere light and colour, coloured spots, red luminous balls, clear green stripes, and such like, became so far modified that at the height of a paroxysm there were presented special forms, such as heads of horses and asses. He also saw human faces resembling those with whom he was acquainted, and believed that he was surrounded by them. The operation of neurotomy was performed, and during the week following there were no appearances of light or colour, nor hallucinations, although previously he scarcely ever passed a day without them."

Among the conclusions which Hagen draws from his enquiry he insists that every hallucination is a sign of disease, but that the disease is not necessarily mental. As regards the relation between hallucinations and the forms of mental disease in which they occur, he has observed them much more frequently in melancholia than in mania. He reconciles this with his theory of the production of hallucination, by regarding the centrifugal action in the nervous system as finding its exit in the former by the sensory channels, and in the latter by the motor. The form of melancholia in which they occur is the simple form which either ends in recovery or passes into the chronic form, but they are never found in those acute forms which pass into pure mania, nor in those chronic forms in which mania and melancholia alternate. They are also absent in cases of complete dementia.

In discussing the forensic aspect of the subject the author says:—"Those who look upon hallucinations as undoubted symptoms of mental disease must of course consider those labouring under them as irresponsible. According to our investigations, however, hallucinations give only a presumption of the existence of mental disease; whether it is really present must be otherwise determined. And it is not to be admitted, as is sometimes asserted, that a hallucination may be the only symptom of an insanity, or that insanity may be indicated by it alone. Hallucination is immediately and essentially a somatic symptom, and as such reveals no mental disease. If such be present it must be shown by other signs. Where this is impossible—where a hallucination has taken possession of an uneducated and superstitious person, it would be necessary that such an unusual and perplexing condition should re-

ceive the most careful consideration from the judge. The physician has nothing to do but to point out the existence of the hallucination, and to explain whether or not the suspected cerebral affection presents any other symptoms which are peculiar to mental disease. In how far a person may be driven by hallucinations into a sudden and blameless confusion of ideas, as through a powerful impulse, or whether they may not be made use of by an "egoistical" fanatic in furtherance of his designs, is no part of the medical, but of the purely psychological consideration which the judge can himself determine. It is also shown by cases of this sort that no sharp demarcation between freedom and restriction (in the legal sense),—responsibility and irresponsibility, can be applied in actual practice, but that degrees of responsibility must be admitted. "In regard to therapeutics," continues the author, "I have little to say. It does not follow from my view, as I formerly believed, that those drugs which are considered especially anti-spasmodic in their action should be specially indicated in the treatment of hallucinations. Indeed these have rather lost their renown even in regard to convulsions. The indications are the same as for the treatment of insanity in general."

Relation of Spinal Degeneration to Insanity.—Dr. Ludwig Kirn reports a case in which symptoms of degeneration of the posterior columns came on in a patient who had previously exhibited distinct symptoms, for some years, of dementia paralytica. The first symptoms appear to have been the result of onanism, and the delusions had reference to disturbances in the general sensibility, partaking chiefly of the character of hyperesthesia. The case is peculiar from the mental symptoms having so long preceded the physical. Dr. Kirn considers it to be the type of a special group of psychoses, to which he applies the name of *Dysphrenia sexualis*.

Atrophy of the Optic Nerve in Insanity.—Under this title Dr. Hermann Wendt describes three cases in which these conditions were concurrent. In the first case there was a tumour (Spindelzellensarcom) as large as a goose egg in the right anterior fossa of the cranial base. The optic nerves were not altered in their naked eye appearance, but microscopically there were found atrophy of the nervous and proliferation of the connective tissue. There was also slight inequality in the corpora quadrigemina, the left side being the smaller. The mental history was one of gradually advancing weakness for three years, after which slight excitement came on with delusions, and hallucinations of hearing, followed in a few months by somnolence and death. There was slight weakness of vision observed at the commencement of the symptoms, which left internal strabismus, and towards the end sudden passage into complete amaurosis. There were also in an early stage involuntary micturition, and later, convulsions in the left arm. The optic atrophy was found in both eyes, and at no time was there any symptom of neuroretinitis. The salient points of the second case are "Considerable mental disorder in 1857, with amblyopia, optic atrophy,

progressing blindness, and delusions of persecution. In 1862, maniacal excitement, grandiose delusions, hallucinations of sight and hearing, unsteadiness in gait, diminished sense of taste, and involuntary micturition. In August, 1864, an epileptoid seizure, transitory anaesthesia of lower extremity, carbuncle and phlegmonous inflammations. Repeated epileptoid seizures, after a series of such attacks, death in 1866. The autopsy revealed abnormal development of bone on internal table of skull, and in the falk. Firm adherence of dura mater to cranium; oedema of pia mater and adhesion to cerebral surface. Inner layer of cortical substance very red; dilatation of lateral ventricles; granulation of the ependyma. Optic nerves thin, broad, and grey. Grey degeneration of posterior columns of cord. Pulmonary oedema, and cardiac dilatation." In this case the affection of the retina was the first unmistakeable symptom of the cerebral lesion. The main features in the history of the third case were as follows. The first symptoms shewed themselves previous to 1855, and consisted of signs of cerebral congestion, delusions, excitability, and salivation. In 1858 pulmonary tuberculosis. In 1861 failure of vision in the right eye, which, owing to frequent pressing and pulling, protruded appreciably from the socket. In September, 1863, complete blindness in both eyes, atrophy of the optic, right cataract, and marasmus. In February, 1865, death. Autopsy: Bones of skull compact; atrophy of brain; atrophy of optic nerves, especially the left. Right anterior prominence of corpora quadrigemina small. Pulmonary tuberculosis. The more marked atrophy of the left optic nerve and also of the right anterior eminence of the corpora quadrigemina were probably in genetic connection. The study of the connection between diseases manifesting mental symptoms and morbid ophthalmoscopic appearances possesses great interest. But nothing has been shown as yet to warrant us in supposing that the retina undergoes any changes distinctive of such diseases.

Eleven propositions regarding Delirium Acutum, by Dr. Schüle, of Illenau.—"1. Delirium acutum is the clinical summary of a group of symptoms, consisting in certain disorders of the mental and motor functions, is the sign of a grave affection of the whole organism, and is of a dangerous character. 2. The mental lesions are clinically distinguished by a high grade of alteration of consciousness, which exhibits itself on the directly mental side by a peculiar form of delirium, and on the somatico-mental side by a disturbance of the physiognomic and mimetic innervation. 3. The motor lesions consist, besides the above mentioned changes of form in the groups controlled by the will, directly in a very exalted reflex excitability, in ataxies frequently with contractions of the surrounding muscles, and general or partial convulsions. 4. The grave affection of the organism shows itself in the signs of sudden loss of strength, generally accompanied by considerable febrile disturbance; the course of the malady has a deceptively remittent, always very acute, and generally very fatal character. 5. This assemblage of morbid signs is exhibited clinically in two concrete

groups—maniacal and melancholic, which latter also appears in an excited and a depressed form. 6. The symptoms of the maniacal form consist essentially of an acute inflammatory cerebral irritation, and thereby approach in character the meningitic processes; the melancholic form exhibits essentially the symptoms of a high degree of disorder of blood life, and approaches thereby the results of inanition and the typhoid processes. 7. The pathologico-anatomical conditions show in the maniacal group the signs of an intense involvement of the vessels of the membranes, and of the superficial cortical layer, often with adhesion to each other and softening of the latter; in the second group on the other hand the *post mortem* appearances generally indicate cerebral anaemia, though they are also often of a negative character. But there are very frequently lesions of the extra cerebral organs, such as especially pneumonia, and diphtheritic inflammations, and a greasy condition of the blood, and a strong tendency to the occurrence of ecchymoses. 8. The clinical group which is included under *Delirium acutum* consists therefore in its idiopathic cases of acute Meningo-periencephalitis, and of a definite group of typhoid affections in processes of inanition. 9. It occurs also secondarily as the result of pneumonia, pleurisy, abdominal typhus, in the course of chronic cerebral diseases, such as general paralysis, in the cerebral affections produced by alcoholism, and in the course of hysterical disorders; but the group of symptoms which constitutes a simple recent *Mania* may be altered either permanently or transitorily into the character peculiar to *Delirium acutum*. 10. Its occurrence in the course of the most diverse chronic and acute diseases of the brain and other organs, but still more the want of any specific clinical characteristics would lead us less to endeavour to refer the group of symptoms to a special genus of disease, than to regard it as the symptomatic expression of a certain gravity in the cerebral affection, whether it be occasioned by lesion of the cortex or by congestion or altered nutrition in other structures. The mental and psycho-motor symptoms specially belonging to it have in this general sense an important diagnostic character. 11. In the treatment of the meningitico-maniacal class of cases the cautious application of antiphlogistic remedies is necessary, such as tepid baths, narcotics and calomel cautiously administered, with strict avoidance of external stimulus. In the melancholico-typhoid class, on the other hand, there must be careful nourishment of the patient by forced alimentation, at a late period quinine with acids, and during convalescence opium and malaga."

Contributions to the Pathology and Pathological Histology of the Brain and Spinal Chord.—Under this title Dr. Schüle gives the details of seven of the most interesting cases which occurred in the Asylum of Illenau during the summer of 1867. Five are cases of dementia paralytica, in regard to three of which the author finds Professor Westphal's views of the connection between that affection and degeneration of the spinal chord fully corroborated. All three

are different, not only in their histological but also in their anatomical details. They belong clinically to Westphal's second group, and in every one there was disease of the posterior and lateral columns. In one there was also disease of the grey nucleus and anterior columns, and in two there was partial spinal meningitis. Between the two first reported cases there was considerable resemblance. Both exhibited the morbid alteration chiefly in the lateral columns. In one of these cases the secondary character of the degeneration was unmistakably shown by the microscopical examination, as was also the relation observed by Türck between this condition and the affection of the corpus striatum and especially of the internal capsule.

Mechanical Restraint in the Treatment of the Insane, and its gradual Abandonment in the Asylum at Hall in the Tyrol.—In our own country we have now so little opportunity of comparing the results of non-restraint and its opposite that it is both interesting and useful to watch the progress of the battle which is still going on elsewhere between the disciples of the new creed and their opponents. One of the most effective strokes which has been dealt by the reformers is the paper by Dr. Stoltz giving an account of his gradual conversion. He is fortunately temperate in his style though convincing in his argument. "Coercion and restraint of the insane have been employed," he says, "as long as there have been any insane. They have continued to be unavoidable ever since the introduction of a rational treatment, and can never be done without as long as insanity exists. The sad necessity of their application lies in the nature of the affection. We have therefore only to concern ourselves with the extent, the degree, and the mode of application of these measures; and in regard to these the views of alienists may differ and their practice be widely divergent. If the English have NON-RESTRAINT inscribed above their doors it is, if taken literally, an untruth to which the walls on which it appears amply testify. But in spite of the untruth which a strict etymology detects in the expression, and in spite of the circumstance that this phrase is said to produce a false impression on the public mind, we, as physicians, quite understand its signification. I understand thereby those modes of treating the insane in which the employment of close corporeal restraint by means of restraint chairs, strait waistcoats, fastening of the limbs, and such measures are not had recourse to, and which systematically excludes close mechanical restriction as useless and injurious. Non-restraint is a kind of confession of faith whose adherents publicly profess to devote themselves to a certain mode of treatment. So long as the treatment of the insane is rationally carried on its aim must be the advancement of humanity in the treatment of the unfortunate patients; and this has been its aim even when the practice has been led by a faulty theory into error." Every mode of treatment must, however, be subjected to rigid criticism, and this the author wishes to be applied to the system of non-restraint, though he has no doubt

of the result. Accordingly he submits to his countrymen the details of his own experience of the system. "My endeavour has been to reduce mechanical restraint to the minimum of what is justifiable, and I have most earnestly devoted myself to it." It has not therefore been in the spirit of the doctrinaire determined to carry out his theory at all hazards that he has worked, and it is satisfactory to find that for twenty-one months previous to the writing of the paper no mechanical restraint had been used in the institution under his superintendence. He was appointed in the year 1841, as successor to Dr. Tschallener, who had been a follower of Heinroth, and who had adopted as his motto the saying of Goethe—"In der Beschränkung nur zeigt sich der Meister." The condition of matters must have been sad indeed. Dr. Stoltz says "those who saw the frequent cruel proceeding of striking them on the head (*Kopfbrechen*) must have felt deeply for the poor patients. No wonder then if we physicians and chaplains greeted with joy the spread of non-restraint in England; and from thenceforward I was prepossessed in favour of that system." Amid many difficulties, such as only the oldest in the profession here can sympathise with, Dr. Stoltz gradually disentangled his treatment from the prevalent abuses, and he now presents in tabular form the results of the old system, and of its gradual supersession by the new. The first two tables give the cases in which mechanical restraint was employed from 1st November, 1854, to 31st July, 1867. During this period 27 patients were subjected to coercion. "This steadily underwent decrease along with an *increasing* average number resident, and a proportional *decrease* in the staff of attendants, so that from 1st April, 1866, till the present time (December, 1867) no restraint has been employed. The accidents also decreased both in number and importance. The third table gives the economic results, as regards clothing, bedding, and linen, during two periods of twelve years each, the former of which was during the administration of my predecessor, when there was an extensive use of restraint; the latter corresponds with the time of my own administration, during which the market price of the articles has been on the average somewhat higher. Notwithstanding this, the average expense for each patient in the former period amounted to 19fl. 41kr. (£1. 12s. 10d.) and in the latter to 14fl. 30kr. (£1. 4s. 2d.), a result which certainly does not support the idea of the cheapness of mechanical restraint."

"The fourth table represents the admissions and removals from the asylum during my twelve years administration. It there appears that in the period from 1st November, 1854, to 31st December, 1866, there left the asylum 389 males and 280 females, total 669. Of these there were recovered 32 per cent.; decidedly improved, 25 per cent.; making together, 57 per cent.; that is, more than the half of the removals, a result which agrees with that exhibited in the majority of asylums; so that, at the least, it does not tell against the non-restraint treat-

ment." The author discusses the supposed value of restraint in those cases in which its defenders affirm its special usefulness; and it is useful, even though it be to us a well trod path, to go occasionally along the old line; and there is always a pleasant freshness of statement in the argument of a neophyte. "The fact," says Dr. Stolz, "that many maniacs immediately before the onset of an attack themselves desire the restraint, affords no certain indication of its advantage. It is chiefly an act of use and wont, and shows merely that the patient desires to anticipate the forcible application of the restraint. Of similar significance is the behaviour of a maniac which I have observed in our asylum. Immediately before the attack he throws aside his better clothing and rushes into the seclusion-room shutting the door behind him." As regards the treatment of dangerous patients, he says, "It would take too long were I to discuss fully the active and passive dangerousness of the insane as regards themselves and surrounding objects; my demonstration would degenerate into casuistry, and after all be imperfect. It could always be said to me by an objector, 'This case of mine remains unprovided for, and in this it is necessary to apply restraint.' I can only reply that I attain my end without restraint, and every one who is truly in earnest will be equally successful." He also remarks, that "dangerous outbreaks of the graver kind are as a rule of short duration, and the apparatus of restraint do not in these cases afford a sufficient protection." And an observation which he makes, that he has "less frequent necessity to have recourse to seclusion now than during the reign of restraint," affords good evidence of his having grasped the true principles of the system. We may now take leave of the author by quoting his last sentence, which is remarkably satisfactory, especially when we remember the previous tendency of the Journal in which it appears. "I consider that I have successfully demonstrated by my asylum practice that the mechanical management of the insane without close mechanical restraint is in general possible; I am convinced that the abolition of this restraint is a beneficial and curative measure; and I confidently leave to the further development of psychiatry the settlement of the question whether the adoption of non-restraint be desirable or possible."

The Prognostic Significance of Inequality of the Pupils in Insanity.—Dr. Nasse, of Siegburg, contributes a valuable paper on this subject. "Since the treatise by Seifert," he says, "I am not aware of any publication which has been devoted to this investigation, and while I admit the general correctness of his observations, I do not think that they afford a satisfactory basis for the consideration of the prognostic value of the symptom, and particularly, I think, that they are defective in regard to what concerns the connection between insanity and disease of the brain. Having for several years devoted particular attention to this investigation in various asylums, I think it right that I should now explain my views regarding it. In the first place I must remark

that the inequality of the pupils occurs much more frequently among the insane than seems to be generally supposed by alienists, at least in Germany. My observations agree entirely with those made by Castiglioni at the Senavra, and also with those of Austin whose investigations, however, only refer to paralytics. Among 146 insane persons Castiglioni found the pupils normal only in 36. During last year the inmates of the curative asylum at Siegburg were examined; and out of 229 there were only 83 found with normal pupils. I may add that at times the proportion of patients presenting inequality of the pupils is much greater, and that often for weeks no patient is admitted without it; and this, notwithstanding that the greater number of paralytics and demented, who form a great proportion of such cases, are congregated in the institution devoted to the mere care of incurables. Since I gave greater attention to this condition of the pupils I have been met with the conviction that the lesion of the pupil is not isolated, but generally associated with disturbance of the innervation of the region of the facial and hypoglossal nerves. At first when I observed the laxity of one side of the face, the distorted mouth, the divergence of the point of the tongue, often also the lateral dragging of the uvula, associated with a difference of the pupils, I attributed these appearances to general paralysis. The want of the other motor lesions manifested by this disease, the merely unilateral occurrence of the above symptoms, and their existence without any of the accompanying psychical characteristics of the paralysis taught me, however, so much the sooner to recognise these partial paralytic symptoms in all forms of insanity without distinction. It appears to me that the attention of alienists has been but slightly directed to the observation of these phenomena; at least they have been only rarely reported, and Seifert has only observed once among his cases the dissimilarity of the two sides of the face and tongue. How very frequently, however, these lesions occur may be understood when I give the statistics of the 229 cases which I examined in August of last year. Only 56 exhibited no difference in the pupils, or sides of the face, or divergence of the tongue, 14 being males and 42 females. There was merely inequality of the pupils in 40 cases, 13 males and 27 females; simultaneous inequality of the pupils, laxity on one side of the face, and lateral dragging of the point of the tongue in 106 cases, 66 males and 40 females; and similarity of the pupils with dissimilarity of the sides of the face, and divergence of the tongue in 27 cases, 16 males and 11 females. Similar proportions have been found by me in repeated observations, and justify the conclusion that only about a fourth of the patients who have come under my observation exhibit no abnormality of the pupils, face, or tongue. From this great frequency it is of course evident that these lesions are by no means confined to general paralysis and dementia, but are found in considerable proportion also in the primary forms of mania and melancholia. Seifert had previously made a similar observation in 24 cases, and I therefore consider it

superfluous and useless to go more into detail as to the frequency of their occurrence in the different forms of insanity. I would, however, mention that I have found these partial paralytic symptoms in general paralysis more frequently than the other observer. Seifert has among 25 paralytics observed differences in the pupils 17 times; Pelman, to whose hitherto unpublished observations I am kindly allowed to refer, has observed it 25 times among 50 paralytics: and von Linstow, in Schleswig, has observed it in a third of his cases. Among 108 cases of general paralysis which within the last four years have come under my observation in Siegburg, the proportions were exhibited in the following manner. Of the 25 female patients, only one showed no alteration of the pupil; in three others there were other affections of the eye—glaucoma, opacity of the cornea, and synechia of the iris, which excluded any opinion regarding condition of the iris; in the remaining 21 there was considerable inequality of the pupils. Of 83 paralytic males, 76 showed considerable difference in the pupils; 2 others had constant pinhead contraction of both pupils; 2 suffered from disorders of the eye—synechia of the iris, and opacity of the cornea, which permitted no opinion as to the pupils; whilst only in 3 cases was no abnormality detected. Of 103 cases therefore, only 4 were free from alteration. This agrees with the observations of Austin who only found two exceptions among 100 cases of paralysis. I cannot, however, omit to remark that the claims of this observer to reliability, in general are only slight. He has concluded from his observations that there is a certain relation between the side of the body on which the alteration of the iris occurs and the form of the delirium, that the affection of the right pupil corresponds with a melancholic character, and that of the left with a maniacal character of delirium. He also believes that the condition of the pupil alters regularly with the exaltation or depression of the mental state. Immediately after the appearance of his essay, Pelman took pains to test the accuracy of this in the private asylum of Dr. Reimer, at Görlitz, and from the investigation of 30 cases of altered pupils found that the opinion was in no way corroborated. Austin has brought forward 14 cases of mixed delirium in which the condition of the pupil altered according to the character of the mental state. Pelman had an opportunity of watching the appearance of sudden changes in the dilatation of the pupils in both eyes in a general paralytic for six months, and this case is particularly suited to show how untenable Austin's view is. The patient exhibited a most remarkable variability in the alteration of the pupils, now the right and now the left was considerably dilated, and these changes often occurred during the course of one day, and often only during several weeks. In spite of his highly developed self-consciousness the patient was free from the peculiar grandiose delusions, but showed the characteristic rapid and transitory changes of disposition. A continued comparison of the temperament with the condition of the pupils, revealed not merely that the pupils frequently remained

perfectly unchanged when there was change of disposition, but the dilatation of the right pupil occurred more frequently along with a cheerful temper and that of the left more frequently with a state of depression, a result diametrically opposed to Austin's statement. It appears to be scarcely necessary to add that though I have for a long time directed my attention to this condition of paralytics, I have arrived at exactly the same conclusion; and in simple mania or melancholia I have found Austin's view equally unsupported.

"If we enquire into the conditions of these paralytic symptoms we must not forget that they may have their origin in disease of the visual apparatus itself, that is, in the retina or optic nerve. Billod has already in regard to this published extensive researches. Among 400 cases he only found 3 in which amaurosis was found as a cause of change in the pupil, and he ascertained the frequency of the latter without the presence of the former. The alterations found by Koestl and Niemetschek in their ophthalmoscopic examinations of 142 patients in the asylum at Prague, are indeed more numerous. Examinations made by experienced oculists on repeated occasions in a number of cases at Siegburg, which presented most striking inequality of the pupils, only revealed, in a few instances, atrophy of the optic nerve, while in all the rest no disease of the visual apparatus was ascertained. It therefore appears that by this means we can only in a few cases explain the so frequent inequality of the pupils among the insane. We must look for the cause in the direct influence of the motor nerves of the iris, of which the oculomotor governs the sphincter, and the sympathetic the dilator iridis. But as to which of these nerves is affected, whether a constant dilatation depends on paralysis of the oculomotor or irritation of the sympathetic, or whether contraction depends on irritation of the oculomotor or paralysis of the sympathetic, must at present, from the impossibility of investigating by physiological experiments the share of each nerve, be an insoluble problem. We know, indeed, that according to the researches of Budge (*Ueber die Bewegung der Iris*, p. 184) the dilatation of the pupil by atropia results more from its action on the oculomotor; and recently Royow in his investigations believed that he must refer the action of the Calabar bean to irritation of the oculomotor, and in no way to paralysis of the sympathetic. And if we also take into account the circumstances that the pinhead contraction of the pupils, which we frequently observe in general paralytics, passes always into dilatation under the application of atropia, and, as I have seen in several cases of remarkable unilateral dilatation of the pupils in paralytics, immediate contraction is produced by the Calabar bean, one is disposed to attribute to the oculomotor a predominating share in the changes of the pupil in our patients. But we must not conceal from ourselves that this view can only be taken as a supposition so long as strong proofs are wanting of alterations in the origin or course of this nerve. It only remains to seek in the brain itself the cause of the alterations of the pupil, as Linstow has done in regard to

paralysis. On account of the usual absence of ptosis and strabismus, and as the pupils which are unaffected by the stimulus of light are still dilatable by atropia, while the eye retains its clearness of vision, he considers that the cause is to be found in the want of the reflex communication in the brain between the optic and oculomotor nerves. Budge also draws attention to the importance of disorders of nutrition in the central nervous system, which, by means of the trigeminus, are capable, according as their form is erethic or torpid, to produce contraction or dilatation of the pupils ; and he is inclined to ascribe an important share in the production of dilatation to torpor in the domain of nutrition and sensation. This, indeed, must refer more to cases of similar change in both pupils in constitutional diseases, while it scarcely contributes to the explanation of the unilateral alteration of the pupils with which we are now concerned.

"The symptom already mentioned of frequent and rapid change in the inequality of the pupils in cerebral affections, which is generally accompanied by mental derangements—of which a striking example has been given, and of whose not infrequent occurrence medical practitioners have often an opportunity of convincing themselves—is scarcely to be otherwise explained than by a participation of the nervous centre. The transitory action of pressure from sanguineous obstruction or serous accumulation on different parts of the brain may occasion such a change, and Leyden (Virchow's Archiv, 1866, 37, 4.) tries to account for the varying difference in the pupils by the imperfect equalisation of the pressure. A very interesting and striking corroboration of this is furnished by Wilks (Guy's Hospital Reports, VII.), in which by the alteration of the position of the head in bed of a hydrocephalic child corresponding dilatation of either pupil could be produced at will ; and the influence of the relation of pressure was thus placed beyond doubt. We may, on the other hand, undoubtedly exclude, as regards our patients, the co-operation of the imagination in voluntary alteration of the pupils, as is observed in some instances among the healthy.

Equal difficulty is met with in attempting to explain the paralytic symptoms affecting the facial and hypoglossal nerves. There are indeed cases in which unilateral paralysis of the face and tongue is known to have resulted from disease of the nervous axis, such as tumours, rigidity of the arteries, &c. These instances are, however, on the whole rare, and do not affect the sort of patients with whom we have here to do, nor do they exhibit that group of symptoms, with simultaneous affection of the pupils, face, and tongue, which we have been considering. The existence of a central cause in the simultaneous affection of the pupils, face, and tongue, in the generally parallel course of the symptoms, and in the continual complication with mental symptoms, may thus appear probable. And this is rendered more credible since the recent researches of C. Bernard and Deiters refer the origin of the nerves of the pupil to the superior thoracic

portion of the spinal cord. But what may be the site as well as the nature of the lesion, whether in the medulla oblongata or a lower part of the cord, must in the absence of suitable pathologico-anatomical data still remain undecided. We may infer from their long and often constant existence after the disappearance of congestion, that these paralytic symptoms cannot be produced by mere hyperæmia such as almost always occurs at a certain stage of the commencement of the mental disorder. The obstinate persistence of the symptoms is much more indicative of a pathological change in structure, which may consist either in inflammatory or serous exudation, or in small sanguineous extravasations. The sudden appearance and slow and gradual disappearance of the paralytic symptoms are rather suggestive of the latter, especially as the onesidedness of the symptoms points to it rather than to an inflammatory process which besides is seldom met with in mental disorders.

"I may be allowed further to refer to the prognostic signification of these symptoms as in accordance with this view. Inequality of the pupils has long been regarded as an extremely unfavourable symptom in insanity, and the belief in a deep and incurable affection of the brain used to follow the discovery of a constant difference between the pupils, especially if there were also other paralytic symptoms in the region of the cerebral nerves. I confess that I myself formerly shared to a considerable degree in this unfavourable view, and allowed myself to be influenced in prognosis by this symptom. Seifert has already truly remarked that the prognosis from difference in the pupils is not absolutely unfavourable; and my present belief, derived from several years' observation of the complication in cases of insanity, is that the opinion may be stated still more strongly, that constant inequality of the pupils in all forms of insanity by no means justifies an unfavourable prognosis, and indeed possesses no important significance as to the result of the disease. Of course, I exclude from this the paralytics in whom the simultaneous occurrence of general motor lesions quite alters the complexion of the case, and in whom the affection of the iris can only be regarded as one member of a whole series. In like manner we must regard the partial paralysis of the face and tongue, to which, however, I never attached the same importance as to the lesion of the iris. The usual course is that all the partial paralytic symptoms decrease and ultimately disappear altogether along with the convalescence from the mental disturbance and gradual improvement of the nutrition; whilst in stationary or progressing psychoses they generally remain unaltered. It also happens, however, that one or more paralytic symptoms remain in spite of the mental recovery, and also that they may disappear when there is no recovery otherwise. In this view I may state as a ground for the above assertion of the prognostic worthlessness of inequality of the pupils the fact that complete and lasting mental recovery may occur without the disappearance of the inequality."

Nasse gives the details of fourteen cases in support of his conclu-

sions, but it is unnecessary to insert them here. "The objection," he says, "that these symptoms occur also among the sane without any known or discoverable disorder of vision, is certainly not to be overlooked. No observer who has directed his special attention to the condition of the pupils among a large number of sane persons can avoid seeing that several are to be met with who exhibit inequality of the pupils, independently of any other affection of the eye, and generally quite unsuspected by themselves. Regarding the frequency of this condition I am, indeed, not in a position enabling me to give definite numbers, not having made observations on a sufficient series of persons for the determination of the proportions; and I am not acquainted with any statistical data in regard to it. I believe, however, with Seifert, that it is to be doubted whether the frequency of this as an abnormality among the sane, which has been properly pointed out by Richarz as a possible source of error, exists in any such proportions as among the insane, or even contributes any considerable contingent thereto. Attention must always be directed to the important distinction furnished by simultaneous occurrence of the other partial paralytic symptoms and by their progress, which, especially among the insane, affixes to these symptoms the unmistakable stamp of disease."

A Form of Mania with great Depression of Temperature.—Löwenhardt describes four cases in which the depression of temperature was greater than has previously been recorded. The lowest temperature mentioned by Wunderlich as compatible with life is 32° C. (about 90° Fahr.) In the first case the temperature ranged for several weeks between 25° and 35° C. (77° and 95° Fahr.) and during the last three days between 25° and 31·35° C. (77° and 88·43° Fahr.) In the second case the heat of the body on the evening before death was only 30·8° C. (87·44° Fahr.), and 29·5° C (85·1° Fahr.) shortly before death. In the third case the temperature during the last five days was from 23·75° to 31·5° C. (74·75° to 88·7° Fahr.) In the fourth case the patient, during the last two days, had a temperature of from 28° to 30·8° C. (82·4° to 87·44° Fahr.) Three of the patients were males and had been drunkards; all were of considerable age, one being 54, two 59, and the other 67 years of age. The mental condition in all was at first a high degree of maniacal excitement; and towards the end in all cases symptoms of a paralytic character showed themselves.

On the Locality of Emotion.—Professor Jessen discusses this subject at considerable length, and concludes that there is good reason to believe that the cerebellum is more especially the organ of the emotions.

Action of Papaverin in Insanity.—Dr. Stark corroborates by his observations most of the conclusions to which Leidesdorf and Breslauer had arrived, and recommends its use as a valuable addition to our list of narcotics.

The Pulse in Insanity.—Dr. Wolff devotes five papers to his researches on this subject, and contributes much that is valuable to our knowledge of it. He shows that by means of the sphygmograph we

may derive important aid both in diagnosis and prognosis. The nature of the essay makes it almost impossible to give a fair idea of it without the aid of diagrammatic illustration.

Enostosis of the Clivus in Insanity.—Dr. Stahl describes certain malformations which he finds to be associated, with more or less bony excrecence, from the internal surface of the clivus Blumenbachii. He describes several cases of what he calls *Facies varia*, or club face, in which the face is bent to left or right, chiefly through the action of the external pterygoid muscle. He also describes a case of *sternutatio convulsiva* associated with cartilaginous exostosis of the clivus. The last form which he describes is one of mimetic contractions of face, in which the domains of the following nerves were affected—the facial, third branch of the fifth, and also cervical and spinal nerves. In this case there was diffuse exostosis of the clivus, affecting the origins of the different nerves.

The Prognostic Significance of Hereditary Predisposition in Insanity.—This interesting subject is treated in his usual careful manner by v. Krafft-Ebing. Believing that the state of our knowledge does not enable us to approach the investigation from either the pathologico-anatomical, or from the anthropological point of view, he confines his attention to the symptomological, in which each case is examined as to the previous mental development and the whole pathogenesis. He tries to determine how far hereditary influence has affected the previous history, or how far there may be discovered in the fully developed disease empirical signs of the aetiology, and facts available for prognosis. He takes, as the basis of his investigation, only such cases as present histories of direct hereditary insanity; and of these he has collected 292 cases (174 males and 118 females). For the purposes of the enquiry he divides them into three classes.

A. Cases in which the direct transmission of insanity has been established, but whose whole history as individuals exhibits no mental abnormality which could be referred to heredity—cases of latent hereditary predisposition.

B. Cases which in early life exhibited periodically or continuously neuropathic and psychopathic symptoms which might be attributed to hereditary influence. The characteristics of such cases are very various. But they may be generally indicated as being of weak nervous constitution, highly emotional, in most cases arriving early at puberty, at the development of which they usually exhibit nervous and mental disturbance; in a word, exhibiting the nervous system as the *locus minoris resistentiae*.

C. The third group includes such cases as do not come under the two previous definitions, but reveal "*ab ovo*, such abnormalities in their mental predisposition and development, as to suggest, and in some cases demonstrate, the existence of congenital mental disease." They come, in some cases, under the head of moral insanity, and in others under congenital and hereditary, stationary or progressive imbecility and fatuity.

According to this classification the statistics of recovery are arranged. "As cases of cure none are taken in which there was not a complete *restitutio ad integrum* both at the time of leaving the Asylum and in after life. As cases of improvement, only those are counted in which the disorder was reduced to the previous predisposition to disease, *plus* the defect resulting from it, or in which the mental capacity has experienced a lasting improvement." The author tabulates them as follows :—

			Number.	Percentage.
Group A.	Recovered	Males	39	58.4
		Females	15	57.7
	Improved	Males	9	13.2
		Females	5	19.2
	Unimproved	Males	19	28.4
		Females	6	23.
Group B.	Recovered	Males	14	16.1
		Females	11	13.2
	Improved	Males	20	23.
		Females	15	17.8
	Unimproved	Males	53	60.9
		Females	58	69.
Group C.	Recovered	Males	0	
		Females	0	
	Improved	Males	2	10.
		Females	0	
	Unimproved	Males	18	90.
		Females	8	100.

In consideration of the comparatively small number of cases, the author does not claim an absolute, but only a relative value for the results; but so far as they go, he considers them of great significance. "The curability stands, *ceteris paribus*, in inverse ratio to the strength of the hereditary influence. In group A., in which the predisposition is latent, the percentage oversteps that of unhereditary cases; in B, it falls far below the average of curability; and in C, it amounts to none at all." The inference deduced from his statistics by Jung, and referred to in a former report in this Journal, that hereditary predisposition in itself furnishes a favourable element in prognosis, "is thus untenable, as it only applies to a certain number of hereditarily predisposed cases. Heredity is of bad omen when its influence attains to a constitutional significance, and acts upon the course of physical and mental development. The more and the earlier that this hereditary constitutional influence makes itself felt, so much the gloomier is the prognosis. And in the highest degree, a hereditary predisposition taking effect *ab ovo*, makes it as hopeless as any psychosis resulting from pathologico-anatomical changes and degenerations in the brain (*hérité morbide progressive*)."

PART IV.—PSYCHOLOGICAL NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

I.—Report of a Quarterly Meeting of the Medico-Psychological Association, held in London at the Royal Medico-Chirurgical Society, by permission of the President and Council, on the 28th October, 1869.

THE Quarterly Meeting of the Medico-Psychological Association was held, by the kind permission of the President and Fellows of the Medico-Chirurgical Society, at their room in Berners Street, on Thursday, October 28th; Dr. Lockhart Robertson, M.D. Cantab., F.R.C.P., Ex-President, in the chair.

The minutes of the last meeting were taken as read, and confirmed.

Clinical Discussion.

THE HYDRATE OF CHLORAL.

DR. BLANDFORD asked if there were any members present who had had any experience in the administration of chloral. Dr. Blandford was inclined to think favourably of its action.

DR. LOCKHART ROBERTSON had received a pamphlet of some interest on the subject from Professor W. Westphal, who spoke highly of chloral as a sedative in the treatment of delirium tremens and in violent and destructive mania, in which latter cases Professor Westphal believed that the chloral would prove of inestimable value in enabling his compatriots—under its soothing influence—to entirely abandon the use of restraint. Dr. Robertson believed that this remedy deserved a most careful study.

DR. LLEWELLYN WILLIAMS said that he had treated several cases of delirium tremens with satisfactory results by the administration of chloral. The important object was to keep up the action of the medicine, which is to be accomplished by frequent doses. He found this practice perfectly safe. The dose he ordered was twenty minims of a solution prepared at Bell's, in Oxford Street.

MR. KESTEVEN had also found much advantage in the use of chloral in delirium tremens. He thought the medicine likely to prove most useful. The dose he usually ordered was six to ten grains of the solid chloral.

DR. LOCKHART ROBERTSON said that he trusted the operation of the new remedy, chloral, would not be lost sight of by members of the Association. He hoped it might prove a valuable auxiliary in the treatment of mental disorders. He regretted to observe that there were no officers of the Hanwell County Asylum present. There was an important question now before the public, and any remarks of theirs upon the case, as being purely medical, would be highly interesting, and a fit subject for discussion here to-night—he referred to the case of SANTA NISTRÌ.

Lunacy Statistics.

DR. LOCKHART ROBERTSON read the following Note :—

THE STATISTICAL TABLES OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION, AND
OF THE INTERNATIONAL CONGRESS OF ALIENISTS, IN 1867.

Since the adoption at the annual meeting of the Medico-Psychological Association in 1867, of the second report and series of ten tables recommended by the committee upon asylum statistics (Dr. Thurnam, Dr. Lockhart Robertson, and Dr. Maudsley), these tables have come into general use in the English and Scotch asylums, and in one or two instances, in Ireland. In their annual report (1868) the Commissioners in Lunacy, in a second notice of this effort of the Association to enforce a uniform system of asylum statistics, expressed a hope that the *Visitors and Medical Superintendents of all the public asylums may as early as practicable introduce therein this system of medical registration.*

If we desire an illustration of the comparative value of the tables of this Association, with any of those formerly in use, it may suffice to compare the report of the Colney Hatch asylum for this year with that of any of the county asylums using our tables. Instead of eight medical tables, as we recommend, there are in the Colney Hatch report, 24 medical tables relating to the male patients, and 28 relating to the female patients, and yet the first requisite in any scientific enquiry into the results of asylum treatment—the mean annual population—is not given in any one of these 52 tables, and one has to turn to the reports of the medical officers to learn this primary statistical requirement.

In 1867, the year in which this Association adopted the series of tables to which I am referring, the International Congress of Alienists, assembled at Paris, appointed a commission to draw up a uniform system of asylum statistics.

Their report is now published. I lay it on the table. I received it with the accompanying letter from the secretary of the Congress.

Projet de Statistique.

“ Congrès Aliéniste International de 1867.
“ Paris, le 31 Mars, 1869.

“ MONSIEUR LE PRESIDENT,—

“ J'ai l'honneur de vous adresser un projet de statistique applicable à l'étude des maladies mentales, élaboré au Congrès aliéniste international de 1867, par les soins d'une Commission spéciale composée de douze membres, représentant les principaux états de l'Europe.

“ Il a été décidé par le Congrès que ce projet serait envoyé à tous les Gouvernements et à toutes les Sociétés de Psychiatrie et de Statistique d'Europe et des Etats Unis, qui seraient invités à nous adresser dans un délai de trois ou quatre mois les observations que l'étude du projet pourrait leur suggérer.

“ J'ai donc l'honneur, conformément à cette décision, de vous prier, Monsieur le President, après avoir fait examiner ce projet, de nous faire parvenir les observations qu'il aura pu provoquer.

“ Veuillez agréer, Monsieur le President, l'assurance de ma considération le plus distinguée.

“ PAUL JANET,

“ Membre de l'Institut, President de la Société Medico-
Psychologique de Paris, et du Congrès
International Aliéniste de 1867.

“ A Monsieur Lockhart Robertson,

President de l'Association Medico Psychologique Anglais,
Hayward's Heath (Sussex.)”

In the July number of the *Journal of Mental Science* in the “ Occasional Notes of the Quarter,” the Editors briefly referred to the publication of these tables.* The

* INTERNATIONAL LUNATIC STATISTICS.—[*Projet de Statistique, applicable à l'Etude des Maladies Mentales arrêté par le Congrès Aliéniste International de 1867. Rapport and Exposé des Motifs. Par M. le Dr. L. Lunier, Inspecteur-Général du Service des Aliénés et du Service Sanitaire des Prisons de France. Paris : Imprimerie de E. Donnau, 9, Rue Cassette. 1869.*]

The efforts of the Medico-Psychological Association to enforce in England and Scotland a uniform system of Asylum Statistics have at length achieved complete success, and are already used in all.

press of business at the annual meeting at York, in August, prevented this report from being officially brought before the Association. I have taken the earliest opportunity at this our first quarterly meeting for scientific discussion, to lay before you the report of the International Congrès and the accompanying tables, and which of course, deserve our most careful attention.

I think it due to the distinguished members of the Statistical Commission of the International Congress of Alienists of 1867, that this association should carefully consider the system of asylum statistics, which they recommend for general adoption, and the arguments in their elaborate report on which this recommendation is founded. When I was about making a translation of this report for our use tonight, the Editors sent me the *American Journal of Insanity* for July, 1869 (an exchange copy), in which I found a very good though rather literal—translation of this report by Dr. Thomas M. Franklin, and which I now proceed to lay before you.

A System of Statistics, applicable to the Study of Mental Diseases, approved by the International Congress of Alienists of 1867. Translated by Dr. Thomas M. Franklin, Assistant-Physician of the Government Hospital for the Insane, Washington.*

the English county asylums, with the exception of those for Middlesex. In a review on the State of Lunacy in 1867, in the January number of this Journal, we observed :—

"The efforts of the Medico Psychological Association to enforce the use of an uniform system of medical statistics in the public asylums receive again the most favourable mention in this last Report of the Commissioners in Lunacy. The second series of these tables are referred to, and in Appendix K. to this Report, the whole ten tables recommended by the Medico-Psychological Association are printed. The Commissioners add that a 'compilation of facts on insanity, registered according to this series of tables, in all institutions for the treatment of insanity in this country, would be of the greatest utility in statistical comparison, and supply the chief requisites for a scientific application of the results of medical statistics. They trust, therefore, that the Visitors and Superintendents of all such establishments may, as early as practicable, introduce therein this system of medical registration.' The Medico-Psychological Association are deeply indebted to the Commissioners in Lunacy for this important recommendation, which will probably insure the general and early use of their statistical tables in the English public asylums."

A more elaborate effort in the same direction has been made by a committee appointed at the *Congrès Aliéniste International* of 1867. They have just published an admirable series of thirty-one tables, with an explanatory introduction by M. Lunier, "Inspecteur-Général du Service des Aliénés et du Service Sanitaire des Prisons de France."

M. Lunier acknowledges, in handsome terms, the obligations the International Congress are under to the previous labours of the Medico-Psychological Association in this direction :—

"La Commission, d'ailleurs, avait pris comme point de départ les tableaux statistiques que MM. Constans, Rousselot et moi avons préparés pour la France, sur la demande du ministre de l'intérieur ; mais elle a fait aussi d'utiles et nombreux emprunts aux documents qui venaient d'être publiés par les soins de l'association des médecins d'asile en Angleterre, à la statistique d'Illenu faite sous la direction de l'un de ses membres, le savant et vénérable docteur Roller, et enfin au dernier rapport médical que j'ai publié en 1863 sur l'asile de Blois."

The French series of tables are much more elaborate than those published by the Medico-Psychological Association, and so far less adapted for general use. We annex the contents of each of the series of tables for the purpose of comparison. Although in a simpler form, the tables of this Association afford, it will be seen, nearly all the information given by the more elaborate forms of the *Congrès Aliéniste International*.—*Journal of Mental Science, July, 1869, Occasional Notes of the Quarter.*

* The following note is appended by the Editors of the *American Journal of Insanity*, July 1869, to Dr. Franklin's translation :—

[“At the meeting of the Association of Superintendents of American Institutions for the Insane held in Staunton, Va., from the 15th to the 18th, inclusive, of June, 1869, Dr. Nichols presented the following translation from the French, made, at his request, by Dr. Thomas M. Franklin, one of the assistant physicians of the Government Hospital for the Insane, near Washington, D. C., of a Project of a System of Statistics applicable to the study of mental diseases, formed and adopted by the International Congress of Alienists held in Paris in 1867. The Project was referred to a Committee of the Association, of which Dr. Edward Jarvis, the American statistician is Chairman, who in behalf of the Committee, at a subsequent session of the Association, made a partial report which was adopted, setting forth the ability of the Project, the high authority of the source whence it emanated, and the great importance of the end sought to be attained; and recommending that it be presented to the Editors of the *AMERICAN JOURNAL OF INSANITY*, with the request that it be given an early insertion in that periodical, to enable the members of the Association to study it carefully, at their leisure, in order to be prepared to consider a modification of the Project applicable to the situation of American institutions for the insane, and the views of American alienists, which the Committee propose to present to the Association at its next annual meeting.”—Eds.]

REPORT AND EXPLANATION OF THE OBJECTS.*

It is no longer doubtful to any one that the numerical method may be usefully applied to the study of mental diseases. Science is already indebted to it for some of the ideas which may be considered as almost definitively accepted in psychology; and it cannot be disputed that it is, moreover, to the results furnished by statistics, that the administration (of institutions for the insane) is beholden for the data which have guided it, and still do guide it, in the application to the insane of different methods of treatment and relief.

But, if the employment of the numerical method be able to contribute to the elucidation of certain points of psychological science, and to furnish to the (professional) administration valuable assistance in management and direction, we must, by no means, exaggerate its importance and demand of it more than it can yield. And then, the crude results which it furnishes, even when they have been gathered by competent men, require to be studied, weighed, criticised with care, without preconceived ideas, and with competent familiarity with the questions which they are calculated to elucidate.

If we have only a moderate degree of confidence, really, in references to mental alienation† in documents gathered, at times of general census taking, by persons who are strangers to the healing art, we attach but little more importance to the comments which may be made upon numerical results gleaned in the special institutions, by statisticians, however intelligent they may be, if they are unacquainted with the working of these institutions and with the different circumstances which influence the movements of their population.

Is it reasonable, for example, to compare, as is still too frequently done, in the matter of the chances of death and recovery, maniacs, idiots and paralytics; and, in another connection, the asylums of large cities, where the admissions and discharges are constant, with others where the annual number of admissions amounts hardly to a tenth of the average population?

But the employment of the numeric method in psychology presents difficulties of another kind. If important questions have really been almost solved by the aid of facts gathered by a single observer, it is not the less certain that each of us will be frequently obliged to declare his powerlessness in this regard, if he have at his disposal only facts which he himself has observed, and if he cannot avail himself of documents published by his predecessors.

Unfortunately, the absence of uniformity in method and in the bases adopted by asylum physicians, in their numerous statistical reports, does not always allow of comparison between their respective figures. There has been, however, within a period of forty years, a sensible progress in this respect. If in the beginning, indeed, each establishment had, so to speak, its tabular forms and its adopted methods, soon, thanks to the efforts of Tuke, of Esquirol, of Guislain, of Heinroth, of Thurnam, of Schroeder Van der Kolk, of Damerow, of Conolly, of Ferrus, of Parchappe, and also, it should be said, to the impulse given in France by the *Annales medico-psychologiques*;‡ in Germany by the *Allgemeine Zeitschrift für Psychiatrie*; in England and in the United States by the *Journal of Psychological Medicine*, the *Journal of Mental Science*, and the *American Journal of Insanity*, there was inaugurated, in each country, a slow but progressive work of unification, which has already produced some good results.

* Made in the name of a Commission composed of Doctors Borrel, Physician-in-Chief, Director of the Asylum of Prefargier, (Switzerland;) John C. Bucknill, Lord-Chancellor's Visitor of Lunatics; J. Falret, Physician of the Bicêtre; W. Griesinger, Professor of Clinical Medicine and of Psychology at the University of Berlin; Lombroso, Professor of Psychology at the University of Pavia; L. Lunier, Inspector-General of the Insane Service, and of the Sanitary Service of the Prisons of France; J. Mundy, of Moravia, member of the Medico-Psychological Societies of France and of Great Britain; Pujadas, Inspector of Asylums for the Insane in Spain; Roller, Physician-in-Chief, Director of the Asylum, Illeau, (Baden); Harrington Tuke, General Secretary of the Medico-Psychological Society of Great Britain; Motel, Secretary of the Medico-Psychological Society of France.

† Under the generic term mental alienation, mental diseases, or *phrenopathies*, we comprehend not only insanity, but also idiocy and cretinism.

‡ See especially: year 1846, vol. VI., on Statistics applied to the study of mental diseases, by M. Baillarger, (p. 163,) and letters upon the same subject from Renaudin and from Aubanel, (p. 467,) year 1856, vol. II., p. 1; report on the statistics of mental alienation, by Parchappe, and pp. 339 and 486; observations upon statistical researches relative to mental alienation, by Renaudin.

But there evidently remained something more to be accomplished. One is now so accustomed to aid himself in the study of questions of this kind, by documents gathered in different countries, that it becomes necessary to have a good system of statistics, not only for each country, but for all those in which there exist institutions for the insane; to establish, in a word, for mental diseases, a uniform international system of statistics. All engaged in the work recognize the need of it, and ask earnestly for it. So, when taking advantage of the presence, at the sessions of the Medico-Psychological Society, of a number of most able foreign alienists, I asked for the nomination of a special Commission, which should be charged to prepare a project of an international system of statistics, no objection was raised, and the Commission was immediately nominated. The Congress made choice of M.M. Griesinger, Roller and Mundy, for Germany; Bucknill and Harrington Tuke, for England; Pujadas, for Spain; Lombroso, for Italy; Borrel, for Switzerland; J. Falret and Lunier, for France.

M. Motel was added to them as secretary. M. Brierre de Boismont, in capacity of provisional president of the society, took equal share in the labours of the Commission, which addressed itself immediately to the work.

After two long sessions and some important discussions an agreement was arrived at, thanks to mutual concessions, and nearly all the bases of the project were adopted unanimously.

The Commission had taken, as a starting point, the statistical tables which MM. Constans, Rousselin and I had prepared for France, at the request of the Minister of the Interior; but it had also borrowed numerous and useful documents which had been published under the auspices of the Medico-Psychological Association in England, also the statistics of Illenau, made under the direction of one of its members, the learned and venerable doctor Roller,* and, finally, the last medical report of the Asylum of Blois, which I published in 1863.

Charged with the compilation of the report, I explained succinctly to the Congress, at its session in August 14th, the result of the labours of the Commission, and proposed, in its name, to have printed, under the title of *Project of a System of Statistics*, an explanation of the objects of the steps taken by the Commission, and the statistical tables which it had adopted. The Commission proposed, also, to send these tables, with the explanatory report, to all the governments and to all the psychological and statistical societies of Europe and of the United States, who should be invited to address to us, in the course of three or four months, such observations as the study of the project might suggest to them.

The epitomizing of the documents received should be done by the French members of the Commission, who, after consultation with their foreign colleagues, should definitively approve the statistical tables, the adoption of which should then be proposed, in the name of the Congress, to all the governments.

This double proposition was approved by the assembly.

EXPLANATION OF THE OBJECTS OF THE STEPS TAKEN BY THE COMMISSION OF STATISTICS.

The Commission has thought it advisable to separate the *medical statistics* from the *administrative statistics*.

We will occupy ourselves first with the former.

MEDICAL STATISTICS.

The subject of medical statistics has almost exclusively occupied the deliberations of the Commission.

It is, in fact, this branch which is capable of furnishing the most practical of results, and the greatest amount of records comparable in different countries.

The first point, assuredly the most important one, upon which it was essential to have harmony, was the determining, not at all a complete classification of mental diseases, but solely the typical forms upon which it would be desirable to bring to bear all the prescribed items of information, under interrogatory headings, in the statistical tables. There was, moreover, a double shoal to be avoided; it would not do to over-multiply the types of mental alienation, to be placed at the heads of the tables, but it was yet more indispensable not to confound, under an individual generic denomination, forms which might present important differences, especially

* Statistik der Heil-und Pflegeanstalt Illenau, Vol. in-4°, 1866, Carlsruhe, at the bureau of statistics of the Grand Duchy.

in regard to etiology. It was to meet this double indication, that the Commission, after a long discussion, decided to place at the heads of their statistical tables only the following types :

1st. *Simple insanity*, embracing the different varieties of mania, melancholia and monomania, circular insanity and mixed insanity, delusion of persecution, moral insanity and the dementia following these different forms of insanity.

2nd. *Epileptic insanity*, or insanity with epilepsy, whether the convulsive affection has preceded the insanity, and has seemed to have been the cause, or whether, on the contrary, it has appeared, during the course of the mental disease, only as a symptom or a complication.

3rd. *Paralytic insanity*. The Commission regards the disease called general paralysis of the insane, as a distinct morbid entity, and not at all as a complication, a termination of insanity. It proposes, then, to comprehend under the name of paralytic insane, all the insane who show, in any degree whatever, the characteristic symptoms of this disease.

4th. *Senile dementia*, which we would define as the slow and progressive enfeeblement of the intellectual and moral faculties, consequent upon old age.

5th. *Organic dementia*, a term by which the Commission means to designate a disease which is neither the dementia consequent upon insanity or epilepsy, nor paralytic dementia, nor senile dementia, but that which is consequent upon organic lesion of the brain, nearly always local, and which presents, as an almost constant symptom, hemiplegic occurrences more or less prolonged.

6th. *Idiocy*, characterized by the absence or arrest of development of the intellectual and moral faculties. *Imbecility and weakness of mind*, constitute, hereof, two degrees or varieties.

7th. *Cretinism* characterized by a lesion of the intellectual faculties, more or less analogous to that observed in idiocy, but with which is uniformly associated a characteristic vicious conformation of the body, an arrest of the development of the entirety of the organism.

Outside of these typical forms, which will be inscribed at the head of nearly all the statistical tables, there are others which should be mentioned, by way of information, in the table of general progression of the population, but which will not figure in the others; these are :

1st. *Delirium tremens*;

2nd. *Delirium of acute diseases*; *traumatic delirium*.

3rd. *Simple epilepsy*.

Cases appertaining to these three orders of morbid affections are often sent to asylums, either from error or from necessity, or, finally, because these establishments possess special accommodations for them.

They evidently should not be confounded, in the statistical tables, with cases of mental alienation.

TABLE I.—GENERAL PROGRESSION OF THE POPULATION, TYPES AND VARIETIES.

Opposite to each of the typical forms and varieties of mental alienation which we are about to indicate, will be set down in so many vertical columns and for each sex :

1st. Those resident on January 1st and those remaining on December 31st following.

2nd. Those admitted during the year.

A For the first time in an asylum.

B On account of relapse.

C By re-entry after escape or removal before recovery.

D By transference from another asylum.

3rd. Those discharged.

A By recovery.

B By improvement.

C By escape.

D On account of transference.

E For other causes.

4th. Deaths :

A By sickness.

B By accident.

C By suicide.

In a final column, altogether distinct from the rest, will be indicated the *average population* for each sex, and for each typical form, if not for each variety of mental alienation. We will call to mind here that the annual average of population is obtained by dividing the sum of the days of presence, of each class of patients, by 365 or 366 according as the year is or is not bissextile.

We can, moreover, in the absence of the data necessary to determine precisely the days of presence, obtain the average population by another method. Experience has demonstrated what indeed reason had only suggested, to wit: that, in establishments where the admissions and discharges are nearly uniform, the average population for a year, ($A P.$) is very approximatively equal to the number of the residents on the first of January ($R.$) increased by half the sum of those admitted ($A.$) and diminished by half the sum of those discharged by recovery, death or otherwise ($D.$); which presents the following formula : $A P=R \times \frac{A-D}{2}$ or $R \times \frac{D-A}{2}$ when D is more than A .

We will state, further on, why it is indispensable to know the average population of each class of patients.

Tables 2 to 12 refer to admissions. To avoid double insertions, above all in the general statistics of a country, there will be considered, in these tables, only the *insane admitted for the first time into an asylum*. There should be comprehended herein, then, neither the relapses which we shall find elsewhere, (table XV,) nor the re-admissions of any kind whatever, nor the transients, nor the insane transferred from one asylum to another.

We moreover, only set forth at the head of these tables eight typical forms, including those ill-defined ones, which it seems impossible to connect with one of the other forms.

TABLE II.—DURATION OF THE DISEASE PRIOR TO ADMISSION.

It is often difficult, when the physician has, for his guidance, only information furnished by the family, to determine satisfactorily the precise date of the development of the insanity. The Commission proposes to take, as a starting point, not the precursors of the disease, but, exclusively, its first manifestations.

TABLE III.—MONTHS OF ADMISSIONS.

The Commission does not ignore the fact that, between the time of breaking out of the disease and that of admission into the asylums, there is often a greater or less lapse of time. It attaches, then, no great importance to this table. It proposes, nevertheless, to preserve it, be it only as a matter of approximative information.

TABLE IV.—CIVIL STATE.

TABLE V.—AMOUNT OF EDUCATION.

The two tables appear to us to require no comment.

TABLE VI.—AGE AT TIME OF ADMISSION.

TABLE VII.—AGE AT TIME OF DEVELOPMENT OF THE DISEASE.

These two tables are the complement of each other.

The Commission has not thought it best to confine itself to the second, assuredly the most important, in the scientific point of view. Too often, in fact, it is impossible to learn the date of the breaking out of the disease, and consequently the age of the insane person at the time of the appearance of the first symptoms.

The Commission has adopted, for the different periods of life, the following divisions: 15 years and under; from 15 to 20, from 20 to 25, from 25 to 30, from 30 to 35, from 35 to 40, from 40 to 50, from 50 to 60, from 60 to 70, from 70 to 80, 80 years and upwards, age unknown.

TABLE VIII.—AGGRAVATING CIRCUMSTANCES AND COMPLICATIONS.

We would be understood to speak, here, only of concomitant diseases and morbid phenomena demonstrated at the time of entry into the establishment, and in no wise of those which supervene after admission: these should figure in the table of incidental diseases, (No. XXV).

In order to avoid extending this table too much, the Commission proposes to admit into it only the following diseases and complications : epilepsy, (considered no longer as a cause, but a complication of certain forms of insanity, of idiocy, or of cretinism,) hemiplegia, paraplegia, scrofula, goitre, deaf-muteness, blindness, congenital or acquired, and in another connection, hallucinations of sight, of hearing, of taste, of smell, of feeling, and finally hallucinations of several senses.

There will be no necessity for totalizing the figures of this table in the vertical columns. To derive from it such information, it will suffice to compare each one of the figures with the number of patients of each category which they shall have furnished. To know, for example, how manycretins were goitrous or deaf-mutes, how many paralytics had hallucinations of sight or of hearing, one would compare the number ofcretins or of paralytics admitted during the year, (not forgetting that we have to do only with those admitted for the first time into an asylum,) with corresponding numbers of cases of goitre or deaf-mutism, of hallucinations of sight or of hearing.

TABLE IX.—SUPPOSED CAUSES OF INSANITY.

It is especially to the study of causes that the numerical method has been applied in psychology. There are, unfortunately, in the employment of this method, many difficulties to conquer, many errors to avoid, and it is because the former have not always been conquered, and the latter avoided, that such contradictory results have sometimes been obtained.

The Commission, after a profound examination of the subject, has decided that it will propose,

1st. To indicate at the head of the table, very distinctly and for each typical form of mental alienation, on the one hand the number of patients regarding whom no reliable etiological information shall have been gathered, and, on the other hand, those regarding whom there shall have been obtained sufficiently precise information to make it possible to determine, with a certain degree of accuracy, the cause or the causes of mental alienation, or the probable absence of every sort of cause, whether predisposing or exciting.

2d. To preserve the generally adopted division of causes into predisposing and exciting, and of these again into causes physical, moral, and mixed.

3d. Not by any means to limit one to report only a single cause for each case of mental alienation, but, on the contrary, to have set down in the table all the causes, predisposing or exciting, which may appear to have had an important influence upon the development of the disease.

It will result, almost necessarily, from this method of proceeding, that there will no longer be any agreement between the number of causes and the number of patients under observation. So there will be nothing gained by totalizing them.

When one would consult this table, he should proceed as we have indicated in the case of table VIII. He should compare the numbers set down opposite to each of the causes with the number of patients of each category regarding whom there shall have been obtained satisfactory information.

The Commission proposes to inscribe upon the table the following causes :

1st. *As predisposing causes:* Heritage direct, (paternal, maternal, paternal and maternal,) collateral (brother and sister) and mixed (collateral and paternal, collateral and maternal, collateral paternal and maternal;) pure consanguinity; great difference of ages between the parents; influence of soil, of surroundings; convulsions or emotions of the mother during gestation; epilepsy; other nervous affections; pregnancy; lactation; menstrual period; critical age; puberty; intemperance (habitual excess, dating far back;) venereal excess and onanism; other predisposing causes; and, lastly, probable absence of predisposing causes, that is to say, cases regarding which, although the information gathered has seemed to be sufficient, the influence of no predisposing cause has been established.

2d. *As exciting causes:*

A. Physical causes; artificial deformities of cranium; convulsions of infancy and dentition; cerebral congestion (we mean to speak, here, of primitive congestions which may be considered as causes, and not of those which supervene at the commencement or during the course of certain kinds of insanity;) organic affections of the brain, senility, pellagra, anemia, constitutional syphilis; intermittent fever; typhoid fever; eruptive fevers; acute rheumatism; gout and chronic rheumatism; organic affections of the heart; pulmonary phthisis; intestinal worms; other acute

diseases; other chronic diseases; suppression of haemorrhoidal flux; menstrual troubles; metastases; alcoholic drinks; abuse of tobacco; other vegetable poisons; mineral poisons, (lead, mercury, copper, others;) insolation, intense heat; intense cold; blows and falls upon the head; other traumatic causes; other physical causes.

B. Mixed causes: excess of intellectual work; prolonged vigils, evil habits and libertinism; onanism, (which operates sometimes as a simple predisposing cause, sometimes as an exciting cause;) troubles of the genital functions; destitution and want; bad treatment; sudden change from a life of activity to idleness and vice versa, loss of one or more senses.

C. Moral causes: appertaining to religion, education, love (love thwarted; jealousy;) family affections; fluctuations of fortune; domestic troubles; pride; disappointed ambition; fright; irritation; anger; wounded modesty; political events; nostalgia; ennui; misanthropy; sudden joy; simple imprisonment, solitary confinement; other moral causes

Finally, probable absence of exciting causes.

The Commission does not ignore the fact, that it is often practically difficult to determine the true mode of action of such or such a cause; so it attaches but a secondary importance to the division of causes into predisposing and exciting; it has thought, nevertheless, that it was better to adopt a classification approximatively exact than to exclude all.

TABLE X.—PROFESSIONS—SOCIAL STATE.

This table will be divided into two parts, the figures of which should be separately added. In the first will appear the following professions:

1st. *Liberal Professions*, to wit: lawyers, physicians, clergymen, professors and men of letters, female teachers, civil officers and employés, artists.

2d. *Military and Marine.*

3d. *Annuitants and landlords living upon their incomes.*

4th. *Trade and Commerce*, to wit: merchants and traders; commercial employees.

5th. *Manual or mechanical occupations*, which comprehend the following classes; mine operatives, metal workers, masons, stone workers and quarrymen, carpenters and joiners, locksmiths, house painters, workers in wood, in spinning and weaving, in leathers and peltries, in wearing apparel, in head dresses, in colors, in printing and lithography, in bleaching, cooks and kitchen aids, industrials other than the preceding.

6th. *Agricultural occupations*, to wit; farm proprietors and cultivators, farmers (gardeners, vineyard-men) hired hands.

7th. *Coachmen and grooms.*

8th. *Domestics* (other than those employed in agricultural work).

9th. *Prostitutes.*

10th. *Without profession.*

11th. *Profession unknown.*

The second part of the table—*Social State*—is applicable only to those countries where there still exist well defined differences between the several classes or castes which form their population; for example, the high nobility, the burgesses, slaves and serfs, etc.

TABLE XI.—RELIGION.

Catholics, Protestants, Jews,.....religion unknown.

TABLE XII.—PLACE OF ORIGIN.—DENSITY OF THE POPULATION.

The Commission proposes to consider as a city, every settlement of not less than 2,000 inhabitants, and to separate those who have more than 10,000 into manufacturing and others. This table will embrace, then, the following categories: 1st, those originating in rural districts: 2nd, those originating in cities, subdivided into cities of 2,000 to 10,000 inhabitants, of 10,000 to 50,000, manufacturing and others: of 50,000 and upwards, manufacturing and others: origin unknown.

TABLE XIII.—PLACE OF ORIGIN.—CONFIGURATION OF THE GROUND.

The admitted will be divided, in this table into four distinct orders, according as they may have originated in countries ; 1st, level ; 2d, mountainous ; 3rd, averagely uneven : 4th, origin unknown.

TABLE XIV.—INSANE CONSIDERED CURABLE OR INCURABLE AT THE TIME OF THEIR ADMISSION.

This table will be arranged differently from those preceding.

At the head will appear, in as many distinct columns, the causes of incurability, to wit : idiocy, cretinism, confirmed general paralysis, local paralysis from organic causes, dementia, epilepsy, the long duration of the disease (3 years of duration, or of sojourn when the date of development of the disease shall be unknown.) One special column will be reserved for cases in which the prognosis may remain doubtful, and another for cases curable. In the first part of the table, the insane will be divided into four classes, according as they shall have been admitted : 1st, for the first time into an asylum ; 2d, in consequence of a relapse ; 3d, by re-admission after escape or removal before recovery ; 4th, by transference ; and for each of these classes according as the admissions shall have been at the request of relatives or friends, (voluntary commitment) or by order of the authorities, (official commitment.)

TABLE XV.—INSANE ADMITTED DURING THE YEAR AFTER RELAPSE.

This table will embrace three distinct parts, with separate addition for each. There will be specified in the first square, the causes of the relapse, (alcoholic excess ; debauchery ; suffering and privations ; grief.....other causes;) in the second, the number of the relapses 1st, 2d, 3d, 4th,.....relapse ; and in the third, the date of the relapse in reference to the recovery, (relapse within three months of discharge, from three to six months, from six months to a year, upwards of a year.)

At the head of the table there will not now be found the typical forms, of which the most part furnish but a very small proportion of the cures, but rather, the varieties of simple insanity which the most frequently recover ; mania, melancholia ; the other column heads may be filled according to circumstances.

Tables XVI. to XX., appertain to the recoveries. Although many of the typical forms admitted by the Commission may be considered as incurable, we have thought it best to make the same disposition in these tables as in tables II. to XIII.

The comparative examination of them will thus be more easy.

TABLE XVI.—AGE AT THE TIME OF RECOVERY.

This table will be arranged like table VI.

TABLE XVII.—DURATION OF SOJOURN IN THE ASYLUM OR OF TREATMENT.

To wit : a few days to a month, from one to three months, from three to six months, from six months to a year, from one to two years, from two to five years, over five years,

TABLE XVIII.—DURATION OF THE DISEASE PRIOR TO ADMISSION.

TABLE XIX.—MONTHS OF DISCHARGES BY RECOVERY.

TABLE XX.—CAUSES OF INSANITY OF PATIENTS RECOVERED.

These three tables will be arranged like tables II., III., IX.

It would, perhaps, have been more scientific to have asked the month of recovery, than that of discharge ; but the precise time of the termination of the disease is often so difficult to determine that it has seemed to us better to preserve the form generally adopted.

The tables XXI. to XXIV., refer to the deaths ; they have the same headings as those preceding.

TABLE XXI.—AGE IN THE MONTH OF DEATH.

TABLE XXII.—DURATION OF SOJOURN IN THE INSTITUTION.

TABLE XXIII.—MONTHS OF DEATH.

These tables are arranged like tables VI., XVII. and III.

TABLE XXIV.—DISEASES WHICH HAVE CAUSED DEATH.

The Commission proposes to classify these diseases by apparatuses or grouped organs, to wit : Cerebro-spinal apparatus, digestive, respiratory, circulatory, genito-urinary, cachexias, surgical diseases, other diseases. In order that there shall be correspondence between the totals of this table and of those of the preceding ones, the deaths by accident or suicide likewise require to be mentioned here.

TABLE XXV.—PRINCIPAL INCIDENTAL DISEASES AND INFIRMITIES OBSERVED DURING THE YEAR.

This table, in its general features, differs in no respect from the preceding, but it will be necessary to give it more extent, and to display it on two pages. There should be mentioned herein only diseases which shall have necessitated special treatment, and accidents of considerable gravity.

In order not to make double insertions, there should not be calculated herein incidental diseases under treatment on the first of January, which shall have already appeared in the statistics of the preceding year. Mention will be made of these, at the head of the table, in a special square, under the two-fold title of 1st, *incidental diseases, under treatment on January 1st*; 2nd, infirmities and cachexias demonstrated on January 1st.

The tables XXVI., to XXVIII. refer to those remaining on December 31st. They have the same headings as the preceding ones.

TABLE XXVI.—CAUSES OF INSANITY.

TABLE XXVII.—AGE ON DECEMBER 31ST.

These two tables will be arranged like tables IX and VI.

TABLE XXVIII.—CURABLE AND INCURABLE.

The Commission has thought it would be interesting to know the number of curables and incurables that asylums for the insane might contain at the commencement of each year. This table is the complement of table XIV., which embraces only patients received during the year, and likewise, only those admitted for the first time into an asylum. It will afford an opportunity to apprehend at a glance, at the commencement of the year, the probable chances of recovery which the population of an institution as a whole may present.

TABLE XXIX.—INSANE OCCUPIED.—NATURE OF THE OCCUPATIONS.

Work is a means of treatment, too generally employed now, in asylums not to render it a matter of interest to know the number of insane employed in each institution, and the nature of their employments. The Commission has not believed, however, that it would be advantageous to enter, in this connection, too minutely into details. It proposes, then, to have set forth in the square devoted to occupations only the following: 1st. Out-door work, embracing: A agriculture and gardening; B embankment work and other. 2nd. Building and moveables, to wit: C masons, stone workers, plasterers; D carpenters, roofers; E joiners wheelwrights; F locksmiths, blacksmiths; G painters, glaziers. 3rd. Sedentary occupations, comprising: H shoe-making, I weaving, spinning, knitting; J different kinds of needle work; K writing; L others. 4th. Washing and bleaching. 5th. Kitchen work. 6th. Patients unoccupied.

The 31st of December is one of the periods of the year when the smallest number of asylum patients are occupied. It is not, then, the number of workers turned out during the last days of December that should be carried into the table but rather that of patients who have been occupied, during the last six months, at the average rate of at least ten entire days a month, whatever may be the nature and importance of the work done. All others should be set down as patients unoccupied.

REGIONAL TABLE.

The Commission proclaims the wish that, besides the preceding tables, asylum physicians would establish, for the territories from which they receive insane persons, regional tables, in which the patients may be classified by provinces, districts, cantons, or communes of origin or of habitual residence, with indication, as far as possible, as to the topographical, ethnographical, geological, and other conditions which may be presented by these diverse regions and the people which occupy them.

Furthermore, in order that these documents may have value, they evidently ought to deal only with the insane admitted for the first time into an asylum, and not with those present at any given period of the year, the numbers of which in fact, could not always give a correct idea of the relative frequency of mental alienation in such, or such a region.

It would be well, furthermore, that in these regional tables, the insane should be classed as in tables II. to XIII. and other similar ones, and that the population of each region should figure opposite to the number of patients which it shall have furnished during the year, or better during a period of five or ten years. Documents of this kind, in fact, have not much value, except when they embrace a pretty extended period.

The Commission proclaims, likewise, the wish that, at times of general census takings, which are at present periodic occurrences in nearly all countries, special commissions, composed of competent physicians, might be charged to make inquiry as to the cases of insanity, idiocy, and cretinism which exist outside of institutions for the insane.

Should this proposition be adopted, it would be desirable that this census taking of the insane at large should be everywhere, in accordance with a uniform system and identical rules, and, better still, that there should be employed the same statistical forms proposed for the special institutions, and particularly table XXVII.

In order to avoid double insertions, and, at the same time, to omit nothing, this census should deal, not only with the insane cared for in their own families, or maintained in strange families, but also with those placed in hospitals, provisional dépôts, convents, &c., which are by no means classed as special institutions, and, consequently, are not called upon to fill the statistical tables designed for those institutions.

We will not conclude what we have to say upon medical statistics, without speaking of the method which it would be well to adopt for determining the proportion of recoveries and deaths.

Let us speak first of recoveries. We have, I will suppose, to calculate, for the decimal period 1851—1860, the proportion of recoveries obtained in an asylum open on the first of January, 1851.

What course shall we adopt? We will, evidently, compare the total number of recoveries with the total number of admissions.

But if we proceed thus for any given period, why not do the same for each one of the years of the period?

Let us suppose now that we have to do with an asylum open before the first of January, 1851, and having, consequently, at that date, a certain population. It is at least probable that among the patients of this establishment cured during the period 1851—1860, there will be found some whose admission will antedate that period. It does not, then, at first, seem reasonable to compare, for that asylum, the number of recoveries with that of admissions.

But if the residents at the commencement of the period have furnished, during that period, a certain contingent of cures, is it not at least probable that those remaining at the end of the period will furnish some also during the following years, and that the number of the latter will not notably differ, all things being otherwise equal, from that of the former? The same observations applies to each of the years of the period.

It is, then, with the annual number of admissions that the number of recoveries is to be compared.

Asylums which receive directly all the patients of a certain district, and admit others only as exceptions, are, in this relation, pretty exactly comparable. It is not the same with those which receive, by transfer, insane persons who have already resided for longer or shorter periods in provisional dépôts, or in asylums especially adapted to patients under consideration. It is proper to take particular notice of these differing circumstances, when one would institute a comparison between asylums constituted differently in this respect.

The surest method, however, of avoiding any wide departure from the truth, is to compare the number of recoveries with the number of admissions, deducting the re-admissions, the transients and those who have already resided in another institution, (asylum or provisional dépôt,) upon condition, however, of first of all deducting from the number of the cured, the contingent which these different categories of admissions shall have furnished to the recoveries.

The results obtained by the method which we are explaining will be, moreover, so much the more nearly exact, as there shall be less difference between the number of residents on the first of January, and the number of those remaining on the 31st of the following December.

Also, when one would calculate exactly, for an asylum, the proportion of cures during a given period, at the commencement of which the number of residents shall have differed considerably from the number of those remaining at the end of the period, let him add to the total number of recoveries a certain number of units which shall be determined in the following manner : He will first calculate, according to the middle years of the period, how many recoveries those remaining on the 31st of December of each year furnish, on the average, during the two or three years following. Let us suppose that the proportion would be ten for each 100. A simple subtraction will give, on the other hand, the difference between the numbers of the population at the commencement and at the end of the period. Let us agree that it would be 200 ; it is evident that it would be required to add to the total number of the cured of the period, $10 \times 2 = 20$ units.

The question is, unfortunately, not so simple in regard to the deaths.

At present, we generally content ourselves with comparing the annual number of deaths with the average population. It is still, in our view, the most rational method.

In order that we may, really, gather useful information from the comparison of a certain number of facts, or of series of facts, it is necessary, in the outset, that these be, if not of the same nature, at least analogous in the point of view from which we consider them.

When one wishes, for example, to compare the death hazards of several classes of patients, belonging to different institutions, in which they have passed, some six months, others an entire year, it is evidently requisite, in order that the comparison between these different classes shall be reliable, that the patients which compose them be reduced by calculation to the uniform condition of one year of sojourn. This is obtained by adding together the days of presence of all the individuals pertaining to each of the classes or institutions which it is proposed to compare, and dividing the sum by 365 or 366 ; the quotients represent the average population of each establishment, that is to say, the assumed number of patients who have been exposed, during the entire year, to the chances of death, inherent in the special conditions which created for them the disease.

It is with this average population (A.P.) that we are to compare the deaths, (D.) in order to obtain the proportion of mortality in each institution.

The relative mortality (M.) obtained by this method, which offers among other advantages, that of permitting comparison of mortality in asylums for the insane with that of the general population, does not, by any means, represent the death hazard of each patient contained in these establishments. These hazards (P.) are, for each individual, in direct proportion to the number of days which he has passed in the institution (D.y.)

$P = \frac{M}{365} \times D.y.$ $\frac{M}{365}$ represents the mortality of a day, or the mortuary coefficient of each day of the patient, (C.) which may be obtained directly, again, by dividing the deaths by the sum of the days of presence (S. D.y.) $\frac{D}{S.D.y.} = \frac{M}{365} = C.$

If admissions and discharges occurred in nearly the same manner and under the same circumstances in all institutions, the results, thus obtained, would be as rigorously comparable as one has a right to demand that parallel matters shall be. Unfortunately, it is not so. We have already spoken of the differences observable, in this respect, between houses for treatment and houses for the incurable : but there exist also great gulfs between asylums which serve great centres of population and those differently situated. In the former the number of admissions is relatively higher than in others ; and as the newly admitted, especially in large cities, furnish a considerable contingent of deaths, the relative mortality of these establishments is found grown to large proportions, without it being possible to trace the cause to the hygienic conditions which they present.

We may, to a certain extent, correct this cause of error ; by taking into calculation the average duration of sojourn in each establishment, (D. S.) which may be ob-

tained by dividing the sum of days of presence, (S. D.y) by the number of patients treated, (T.) $D.S. = \frac{S. D.y.}{T}$. By multiplying this average duration of sojourn by the mortuary co-efficient (C. or $\frac{D}{S. D.y.}$) we have the average chances of death of a patient, ($\frac{S. D.y.}{T} \times \frac{D}{S. D.y.}$). Exactly the same result is obtained by dividing the number of deaths, (D) by that of the patients treated, (T.) In fact, $\frac{S. D.y.}{T} \times \frac{D}{S. D.y.} = \frac{D}{T}$. In multiplying, furthermore, this result by one hundred, we have the mortuary rate of one hundred patients, otherwise called the relative mortality for a hundred.

We think, then, that if it be well, in determining the relative mortality of an institution, in comparison with that of the general population, to compare the deaths with the average population, it will be equally well to establish the comparison between the deaths and the patients treated. The results obtainable by this double method will permit us to compare with each other asylums constituted, as regards their population, the most dissimilarly.

The most important thing, again, in questions of this nature, is that all observers adopt the same method, that each of us may profit by the documents gathered by his predecessors.

ADMINISTRATIVE STATISTICS.

The administration will find, in the tables of medical statistics, most of the documents which are needful to the solution of questions relative to the management and relief of the insane. There is wanted, however, information of another kind, for which it has appeared to us necessary to establish two special tables.

TABLE XXX.—GENERAL PROGRESSION OF THE POPULATION.—ADMINISTRATIVE STATEMENTS—ASSISTANCE AT RESIDENCES.

At the head of this table will be indicated, in as many distinct columns, and for each sex; 1st, the price of board by the day or year; 2d, the residents on the first of January; 3d, admitted during the year; 4th, total of the residents and the admitted; 5th, discharges; 6th, deaths; 7th, total of discharges and deaths; 8th remaining on December 31st; 9th, number of days of presence.

In the first part of the square, the insane will be divided according as they shall have been treated; 1st, on account of departments, (one will indicate by name each of the departments which send their insane to the asylum by virtue of an agreement; the others will figure under the title . . . Sunday departments;) 2d, on account of communes; 3d, on account of benevolent institutions or societies; 4th, on account of the Government, to wit A. military, (special regimen, ordinary regimen,) B. marine, (special regimen, ordinary regimen,) C. prisoners, (condemned, accused;) 5th, on account of families, 1st, 2d, 3d, 4th, . . . and lowest class; 6th, on account of foreign governments; 7th, legal residences; unknown.

We consider as maintained on account of departments or Government, all the insane for whom the departments or Government pay any portion whatever of the board; and as being upon a special regimen, all those who receive a regimen superior to the ordinary regimen of the lowest class. We do not here speak, be it understood, of special regimen presented by physicians.

It is not unfrequently the case that insane persons, maintained at first by their families, fall, at the expiration of some months, to the charge of their departments or communes. Others, whose legal residences have not been determined at the time of their admission, are discovered, after a time, to belong to such or such a department. All these changes should be indicated with care in the column *observations*, and there should be an exact reckoning hereof maintained in the calculation of days of presence.

In a special square, forming a part of the same table, and which will be filled according to circumstances, either by the directors of asylums, or by the chief-officers of the different territorial divisions, (provinces, countries, departments, cantons,) will be shown under the title . . . *insane aided outside of asylums*, the lunatics, idiots, or cretins, who shall have been aided either in their own families or in the families of strangers; the rate of the reliefs shall be set down in the column, price of board.

TABLE XXXI.—DEPARTMENTS, (PROVINCES, COUNTRIES, OR CANTONS,) OF ORIGIN OR OF BIRTH OF THOSE REMAINING ON DECEMBER 31ST.

This table will have the same headings as tables II. to XIII. and others similar to the medical statistics. The paying and indigent insane will be herein divided accord-

ing to their department of origin; and when the place of origin shall be unknown, according to the department wherein they shall have acquired their legal residence. The foreign insane shall be set down collectively, without distinction of origin.

Such are the statistical documents which appear to us desirable to ask, each year, from all institutions for the insane. The Commission is not ignorant of the fact, that still more might be prepared, but it has thought it better, at least for the present, to confine itself to the foregoing.

A great result would already have been obtained if these should be all and everywhere properly filled.

OBSERVATIONS

RELATIVE TO THE TABLES.

The typical forms inscribed at the heads of tables II. to XII., XVI. to XXIX. and XXXI., should be understood as follows :

1st. *Simple insanity* comprehends the different varieties of mania, melancholia and monomania, circular insanity and mixed insanity delusion of persecution, moral insanity, and the dementia following these different forms of insanity.

2nd. *Epileptic insanity* means insanity with epilepsy, whether the convulsive affection has preceded the insanity, and has seemed to have been the cause, or whether it has appeared, during the course of the mental disease, only as a symptom or complication.

3rd. *Paralytic insanity*, or dementia, should be considered as a distinct, morbid entity, and not at all as a complication, a termination of certain forms of insanity. There should be comprehended, then, under the name of paralytic insane, all the insane who show, in any degree whatever, the characteristic symptoms of this disease.

4th. *Senile dementia* is the slow and progressive enfeeblement of the intellectual and moral faculties consequent upon old age.

5th. *Organic dementia* embraces all the varieties of dementia other than the preceding, and which are caused by organic lesions of the brain, nearly always local, and presenting, as almost constant symptoms, hemiplegic occurrences more or less prolonged.

6th. *Idiocy* is characterized by the absence or arrest of development of the intellectual and moral faculties, *imbecility* and *weakness of mind* constituting two degree or varieties.

7th. *Cretinism* is characterized by a lesion of the intellectual faculties, more or less analogous to that observed in idiocy, but with which is uniformly associated a characteristic vicious conformation of the body, an arrest of the development of the entirety of the organism.

Under the titles *ill defined forms*, *other forms*, are to be set down all the varieties of mental alienation which it shall seem impossible to associate with any of the preceding typical forms.

There will be mentioned only in table I., patients attacked with delirium tremens, the delirium of acute diseases, traumatic delirium, or simple epilepsy, which shall have been received into the institution by error or otherwise.

TABLE I.—*The average population* is obtained by dividing the sum of the days of presence of each class of patients by 365 or 366, according as the year is or is not bissextile. It may be obtained again, but a little less exactly, by adding to the number of residents on January 1st, half the sum of admissions, and subtracting therefrom half the sum of discharges by recovery, death, or otherwise.

TABLES II. to XIII.—To avoid double insertion, there should be set forth, in these tables, only the insane *admitted for the first time into an asylum*. There should be comprehended herein, then, neither the relapses nor the re-admissions of any kind whatever, nor the transients, nor the insane transferred from one asylum to another.

TABLE II.—To determine the duration of the disease prior to admission, one should take, as a starting point, not the precursors of the mental alienation, but exclusively its first manifestations.

TABLE VIII.—There should be set forth in this table only concomitant diseases and morbid phenomena demonstrated on admission. There is no necessity for totalising the figures.

TABLES IX., XX., and XXVI.—There should be established with a rigorous exactitude, at the heads of these tables, the number of patients regarding whom there shall have been obtained sufficiently precise information to make it possible to determine, with a fair degree of precision, the cause or the causes of mental alienation, or the probable absence of every sort of cause, whether predisposing or exciting.

One should not, by any means, limit himself to assigning only a single cause for each case of insanity. He should set forth, on the contrary, in these tables, all the causes which may appear to have had an important influence upon the development of the disease. There will, therefore, be no need of totalising them.

TABLE X.—Married women who engage in no business, should be set down under the title, *without profession*, whatever may be that of their husbands.

TABLE XXV.—There should be mentioned in this table only such incidental diseases as shall have necessitated special treatment, and accidents of considerable gravity.

TABLE XXIX.—It is not, by any means, the number of workers turned out during the last days of December, that should be carried into this table, but rather that of patients who shall have been occupied, during the last six months, at the average rate of at least ten entire days a month, whatever may have been the nature and importance of the work done. All others should be considered as unoccupied.

Recoveries, mortality.—To establish the proportion of cures, one will compare the annual number of recoveries with that of admissions, deduction being made of the transients, the transferred, and the re-admitted after escape or departure before recovery, upon the condition of deducting from the number of cures the contingent which these different categories shall have furnished to the recoveries.

To determine the relative mortality of an asylum, in such manner as to be able to compare it at once with that of the general population, and with that of other institutions, whatever may be the elements of their population, it is necessary to settle the proportion of deaths. 1st, to the average population. 2nd, to the number treated.

STATISTICS OF THE INSANE,

For the Year 18 .

NOMENCLATURE OF THE TABLES.

A.—MEDICAL STATISTICS.

1. General progression of the }
population .. .
2. Insane admitted for the first } time into an asylum .. . Duration of the disease prior to admission.
3. Months of admissions.
4. Civil state.
5. Amount of Education.
6. Age at time of admission.
7. Age at the time of development of the disease.
8. Aggravating circumstances and complications.
9. Supposed causes of insanity.
10. Professions.
11. Religion.
12. Place of origin ; density of the population.
13. Place of origin ; configuration of the ground.
14. Insane admitted during the } year..... Curables and incurables.
15. After relapse.
16. Insane recovered during the } year..... Age at time of recovery.
17. Duration of residence in the asylum or of treatment.

18. Duration of the disease prior to admission.
 19. Months of discharges by recovery.
 20. Supposed causes of insanity.
 21. Insane deceased during the } Age in the month of death.
 year.
 22. Duration of sojourn in the asylum.
 23. Months of deaths.
 24. Diseases which have caused death.
 25. Incidental diseases and infirmities observed } During the year.
 26. Insane remaining on December } Supposed causes of insanity.
 31st.
 27. Age on December 31st.
 28. Curables and incurables.
 29. Insane occupied ; nature of the occupation.

B.—ADMINISTRATIVE STATISTICS.

30. General progression of the } Assistance at residences.
 population.
 31. Departments of origin or of } December 31st.
 birth of those remaining on

Doubtless the Statistical Committee of this Association will consider and report to the next annual meeting, whether any, or what alterations may be made in the Tables of this Association, in order to approximate them to those of the International Congress, to which to-night I have thus fully directed your attention.

Dr. TUKE—I am much obliged to Dr. Robertson for the notice of my presence at the French statistical meetings. It was a distinction and a great pleasure to me to work as a member of that committee ; at the same time, I trust that too much statistical work will not be forced upon the officers of asylums, under the French system. These tables were made by *intimes* or pupils, and I rather fear that too much work may be cast upon the officers of asylums if their series of tables were adopted in England.

Dr. STANLEY HAYNES suggested that in the table of the causes of insanity more use might be made of the admirable form drawn up by Dr. Skae, which entered into the question of the very foundation of insanity.

Dr. ORANGE expressed his sense of the great practical value of the statistical tables of the Medico-Psychological Association, and which really did not demand any unreasonable amount of labour in their compilation.

Voluntary Patients in Asylums. By STANLEY HAYNES, M.D. Edin.

Dr. LOCKHART ROBERTSON called upon Dr. Stanley Haynes to read the paper of the evening, "VOLUNTARY PATIENTS IN ASYLUMS."

[Dr. Stanley Haynes Paper will be found in Part I Original Articles of this number of the Journal of Mental Science.

Dr. LOCKHART ROBERTSON said that the meeting must feel obliged to Dr. Haynes for the comprehensive view he had taken of the subject, and the careful manner he had placed it before them. That the extension of the plan of greater liberty to the patient, both on entering and leaving asylums, was most important, he quite believed, but he should like Dr. Haynes to reconsider the suggestion that the voluntary patient should under any circumstances be kept against his will.

Dr. TUKE entirely concurred with Dr. Robertson's views on the subject. It was a most important question; already the Act of Parliament permits patients who have been once certified as of unsound mind, to re-enter any asylum without new certificates of insanity. This had worked well, and might be extended with great advantage under proper restrictions. It was obvious that the greater the intercourse between the inmates of an asylum, and the outer world, the less suspicion would there be as to any maltreatment, or unfair detention. It was sometimes also difficult to say that a patient's state approached legally that of lunacy, as in suicidal melancholia, although the symptoms might indicate much danger.

Dr. LANGDON DOWN entirely concurred in the objections raised by the President to Dr. Haynes' proposal of forced detention, under any circumstances, of voluntary boarders.

Dr. HAYNES expected some opposition to his proposal to detain voluntary patients under certain conditions, and as the feeling of the association seemed to be adverse to it, he was willing to withdraw it. He had brought it forward more for the purpose of provoking discussion than with any probability of its being accepted; he had wished to ascertain what others thought with regard to his suggestion, and thanked the speakers for their remarks; but he could not help feeling sorry that the plan was thought unadvisable, because, supposing his other suggestions were adopted in any legislation on the subject of his paper, the new system would resemble that now existing in Scotland, where the great difficulty experienced in the working of the act was that under no circumstances could a voluntary patient be detained against his will in an asylum longer than three days, no matter how homicidal, suicidal, or otherwise dangerous he might be. It had been pointed out that if a boarder were in such a state as to render detention advisable, certificates of lunacy could be obtained, and that he would then become an ordinary patient; this might be—and the Scotch act provides for such cases—but in some of them it would be difficult or impossible to obtain the certificates. He (Dr. Haynes) had hoped that the restrictions against abuse he had suggested would have been deemed sufficient safeguards to satisfy all that there was proper reason and justice why boarders might, under exceptional circumstances, be detained, even though it were against their will. He thought it would be better, whenever a boarder may be certified and so become an ordinary patient, that he should be transferred to another asylum—that he should not be admitted at all as a patient into any asylum into which he had placed himself as a boarder. As his proposal for compulsory detention of boarders was not approved of, he had no objection to withdraw it, and would be well satisfied with the adoption of the other suggestions, believing that good would result from it, and that it would be a stepping-stone to some subsequent and more satisfactory scheme, whereby the lives and properties of voluntary patients might be better protected than at present.

II.—Report of a Quarterly Meeting of the Medico-Psychological Association, held in Edinburgh, at the Royal College of Physicians, by permission of the President and Council, on the 25th November, 1869.

A meeting of the members of the Medico-Psychological Association resident in Scotland and the north of England, was held on Thursday, November 25th, in the hall of the Royal College of Physicians, Queen Street, Edinburgh. The chair was occupied by Professor Laycock, and there were also present—Professor Balfour, Edinburgh; Drs. Skae, Royal Edinburgh Asylum; F. Skae, Stirling District Asylum; Lowe, Balgreen; Howden, Royal Asylum, Montrose; Howden, Haddington District Asylum; Addison, Imbecile Asylum, Larbert; Grierson, Roxburgh District Asylum; Clouston, Cumberland County Asylum; Wood, Newcastle; Fairless, Bothwell; Tuke, Fife District Asylum; Sanderson, Musselburgh; Jamieson, Royal Asylum, Aberdeen; Sibbald, Argyll District Asylum; Bruce Thomson, General Prison, Perth; Smith, V.P.R.C.P., Edinburgh; Smith, Durham, &c.

The CHAIRMAN, in addressing the meeting, said they had all received, as members of the Medico-Psychological Association, a circular signed by Dr. Tuke, their Secretary for Scotland, inviting them to meet there to-day. Dr. Tuke had done him the honour, as President of the Association for the year, to ask his opinion as to the propriety and legality of that step. On looking into the rules of the Association, it seemed to him that the summons to meet there was quite in accordance with the fundamental rule which was to the effect that the Association was established for the promotion of social intercourse among its members, and for the advancement of knowledge in insanity, and its treatment. He congratulated their diligent Secretary that so many had met together. The rules provided in no degree for any other meetings than the annual meeting, but a year ago last August a proposition was adopted at a meeting in London that there should be quarterly meetings of the Association held in London for the purpose of scientific discussion and social intercourse. But he thought they should have a more than usual enthusiasm if they were to travel several hundreds of miles merely to hear a paper read in London. The luxury of such social intercourse with their friends in the south would

be too costly, and it was a very natural conclusion that they should have something of the kind in the north, and in a locality more accessible to the northern members. The only point on which he thought there need be any difficulty in the matter was the question of expense of calling the meeting. There was nothing in the rules warranting the General Treasurer to pay over to Dr. Tuke the expenses of calling this meeting, and it would be for those present to determine whether they should apply to the annual general meeting for funds to re-imburse Dr. Tuke, or subscribe half-a-crown each, which would probably be about the amount required (applause). He would now ask Dr. Tuke to bring forward the business before the meeting.

Dr. TUKE said it would be necessary to come to a decision how often, and where the proposed meetings should take place. He thought quarterly meetings would be too frequent, and he would suggest that half-yearly meetings might be held alternately in Edinburgh and Glasgow. He, therefore, proposed that the next meeting should be held in Glasgow, in the last week of April next.

Dr. FAIRLESS asked if it would not be better first to settle the question whether they should meet at all or not. The proposal now made merely bound them to one meeting and no more. Probably the most regular form of procedure would be to pass a resolution that they would meet irrespective of the general meetings of the Association. This he took to be a purely preliminary meeting.

Dr. SKAE said that at the last meeting in York it was decided they should have meetings of the northern branch, and this was a meeting held in accordance with that resolution. He seconded the proposal of Dr. Tuke that the meetings of the members in the north should be held twice a year, in the last week of April and the last week of November. The reason for fixing these dates was that they divided the year well; and the last week of April being just before the meeting for the University summer session, those members connected with the universities and medical schools would be able to attend.

Dr. CLOUSTON thought the branch that was formed should include the north of England members. He had done all he could to get as many members from the north of England to attend this meeting as possible; and it would be very desirable, he thought, to make the branch one for the northern part of the empire, and not confined to Scotland. In that case it was a question whether they should not meet at Newcastle, or Dumfries, alternately with Edinburgh and Glasgow, so as to identify it more with the north of England. If they met in Scotland only, it seemed to him it would, in a short time, become a purely Scotch thing, whereas they were all agreed that it would be well to include the north of England, and thus make the meetings less of a provincial character than they would be if they were confined to Scotland.

The CHAIRMAN thought the observations which had been made were very appropriate—that they should not only determine where they were to meet, but who should meet.

Dr. SIBBALD thought that the meetings should consist of all members of the Association who came to them, either from the north or south; and if they were to adopt any resolution which merely mentioned those in Scotland and the north of England, it might be supposed by their southern brethren that they were excluded.

The CHAIRMAN said that their Secretary had shown him a letter from the General Secretary, in which it was stated that if fifteen members resided in Scotland, or England, were to present a requisition to the President, he could, according to a certain law, call a special meeting. If fifteen members presented a requisition to him, asking him to call a meeting at Edinburgh on a certain day, he should feel himself bound to submit to the rule and do so; but the practical difficulty was that in summoning the whole Association to meet at Edinburgh, they incurred considerable expense, and still more trouble, and how many would come? Dr. Harrington Tuke said, in the letter to which he had referred, that he would be most happy to come; but he (the Chairman) did not think more than one in twenty of the members of the Association attended the meetings in London, and, on a rough estimate, they would find that each member who attended the meetings, cost at least half-a-crown in postage stamps alone. To call special meetings of the whole Association would, he thought, be such a waste of power on the part of the Secretary, and such a waste of funds, that it would be hardly judicious. He thought it would be quite sufficient to have an intimation in the *Journal* that the meetings would be held, and that all members of the Association were earnestly invited to attend them (applause).

Dr. BRUCE THOMSON said he had come to the meeting with the idea that they were to form a branch of the Medico-Psychological Association, and it seemed to

him the proposal he was about to make would meet the views of those present ;—“That those present resolve themselves into a branch association, always under the Medico-Psychological Association, with the view of having special meetings of those members who are in Scotland, and in the north of England, and others who may choose to attend.”

Dr. SANDERSON seconded the motion. He was under the impression that a branch had already been formed at meetings in England to consist of members resident in Scotland and in the north of England.

Dr. SIBBALD suggested that the resolution should read so,—“That all other members of the Association be invited.”

Dr. BRUCE THOMSON—It has been doubted whether that would be legitimate, and consistent with all due respect to the Association.

Dr. CLOUSTON said he would take the liberty of moving an amendment. He thought that as a branch of the Association they should depute one of their number to make a motion at the next meeting of the Medico-Psychological Society to alter its present rule, that its quarterly meetings be held in London. He thought the London men themselves found that these meetings were too often, and he would suggest that of the quarterly meetings two should be held in London, and two at the option of the Secretary for Scotland ; so that instead of four half abortive meetings in London they might have two successful meetings in London, and two in the north. That would cause less derangement of the present rules. It would simply lead to an alteration to the effect that two of the meetings be held in London and two in the north. He thought that, perhaps, would be more respectful to the Society and savour less of cliqueism. As to the intimations to be given of the meetings, he thought a general intimation in the *Journal* would be quite enough.

Dr. SKAE said, that with all deference to Dr. Clouston, it was impossible for the Society to ignore this meeting altogether ; so that he should bring forward a motion to the effect of proposing next year to institute such a meeting as this. The members who were present at York at last annual meeting would remember that it was then and there proposed that in future they should hold a northern branch meeting in Scotland, and when they mentioned that to Dr. Harrington Tuke, he told them they were at perfect liberty to do so—that there was nothing to prevent their holding the meeting. On that statement there was no formal resolution come to, but they were given to understand that a meeting of the members in Scotland and the north of England might be called through their Scottish secretary, Dr. Tuke. To adopt such a motion as Dr. Clouston proposed would be to ignore this meeting altogether and the one they proposed to hold in February next. He cordially agreed with Dr. Bruce Thomson’s motion.

Dr. SIBBALD said that from the view he took of the matter, he must support the amendment. They could meet independent of the Medico-Psychological Association as often as they liked, but if they were to meet in connection with the Medico-Psychological Association, it must be in a form which that association approved of.

The CHAIRMAN said he had just been reading a letter from Dr. Tuke, in which he says “The more meetings the members have, the better,” &c. He therefore would be inclined to suggest that the meeting should adopt Dr. Bruce Thomson’s simple proposition. They need not call themselves a branch, but simply say “that those present resolved to meet together for the purposes of the Association.”

Dr. BRUCE THOMSON then submitted his motion, amended as follows :—“That the members present resolve to hold special meetings for the more efficient advancement of the objects of the association, by those members resident in Scotland and in the north of England, and all others who may find it convenient to attend them.”

Dr. CLOUSTON then submitted his amendment as follows :—“That the present rule of the Medico-Psychological Association, providing that quarterly meetings be held in London, is thought by the present meeting to be unsuitable, and that it should be altered so as to provide for two of the above meetings being held in Scotland and the north of England.” Shortly, he said, his reasons for making that amendment were the following. He thought it was more respectful perhaps to the original Association, that it was more constitutional and in accordance with the rules of the Association, and did not expose them to the risk, if he might use the word, of being snubbed afterwards. If an influential meeting of the Association disapproved of one of its rules, he did not think any reasonable person would oppose its alteration. They all wanted the same thing, but they must do it in the most constitutional way possible, and his proposal was, he thought, the only constitutional one of the two.

Dr. SIBBALD seconded the amendment.

Dr. HOWDEN (Montrose) said they had the authority of the general secretary to meet, and it seemed to him they were perfectly entitled to meet there if they chose. At the same time Dr. Clouston might bring up his motion at a general meeting of the Association.

Dr. CLOUSTON said he should like to do so, but he wished very much to have the sanction of the present meeting. He could see no objection to pass both resolutions.

The CHAIRMAN said Dr. Clouston's motion was not an amendment, and it was quite possible to pass them both. In fact he thought Dr. Clouston's motion a consecutive resolution to the one proposed by Dr. Thomson.

The motions of Dr. Bruce Thomson and Dr. Clouston were then severally agreed to.

Dr. TUKE re-proposed his motion, "That the next meeting be held in Glasgow on the last Wednesday of April next." A short holiday, he said, generally took place at that time between the University Sessions, members connected with the Universities and medical schools would be able to attend, and it broke up the year into three, as the general meeting of the Association took place always at the commencement of August.

Dr. SKAE seconded the motion, which was unanimously agreed to.

THE CLINICAL TEACHING OF INSANITY.

The CHAIRMAN then brought under the notice of the meeting the propriety of memorialising the managers of the Edinburgh Royal Infirmary with a view to greater facilities being given than at present for the clinical teaching of insanity. He stated that, as matters now stood there was no clinical instruction in mental diseases available to the medical student, except under circumstances such as to constitute a practical denial of it. Those who had attended the Edinburgh Medical School must be familiar with the two wards in the Infirmary, containing from ten to twelve beds, known as the *d. t.* wards, in which cases of *delirium tremens* were admitted and attended to, and where cases of acute mania were brought in and treated as it were on the spur of the moment. These were the sort of cases which came under the care of the practitioner in the first instance, before being taken to the asylum, and instruction in these cases would be most valuable to the medical students. The appliances for the proper treatment of these classes of cases had hitherto been very defective, and not such as modern treatment demanded. He had from time to time given instruction in these wards, but he need hardly say that cases of ordinary insanity were inadmissible to them. There were, no doubt, plenty of asylums, but there was no stimulus for a student availing himself of that means of instruction, and devoting the time and labour to it, even if the means were presented to him gratuitously, and it was hardly reasonable to expect the officers of asylums to instruct gratuitously. It was quite certain, and proved by experience, that unless students were required by the board of examiners to attend that department they would not do it. The cases of mental disorders held a very peculiar position. They had hospitals for the treatment of consumption; but there were no such forms to be gone through as patients being taken before the sheriff and getting certificates as there was with persons who were insane, and the bad effects of such delays were fully shown by an old friend of his, Dr. Thurnam, now physician in the Wilts Counties Asylum. One of the obstructions to the proper treatment of insanity was the keeping of patients away from the asylum so long as to render the cases incurable, and the extent to which cases were thus rendered incurable was hardly to be accredited unless proved by very careful statistics, as they were by his friend Dr. Thurnam. He stated that in twenty cases of insanity, not complicated with other diseases, admitted during ten years, from 1798 to 1808, as many as nineteen recovered, and he went on to prove that if cases were treated within three months of the first attack, four-fifths would recover; but if twelve months elapsed four-fifths were incurable, and so in proportion as the term was longer or shorter. Hence the importance to the public that these obstructions to their treatment of cases should be removed. On this subject Dr. Thurnam said:—'The importance of placing the patient under proper care at an early period of the disorder, is not only apparent from a comparison of the results of treatment, but is equally inculcated by that aggravation of the disorder and increased difficulty of management, which are the nearly uniform results when persons attacked by insanity are detained at home, where they are surrounded by near relatives or by servants, whose attempts to

control them, which they naturally resist, generally prove either futile or injurious. The friends of the patients are not always aware of these facts, but when they are, are too often reluctant to stamp the case with the character, or, as some think, the stigma, of confirmed insanity. It is believed, however, that correcter views with respect to mental disorders, and such as cannot but prove advantageous to the patient, are gradually diffusing themselves in the public mind." One absurd objection raised by the public to their treatment had been advanced by a very eminent historian and politician. It was that mental disorders being treated apart from the general body of diseases were supposed to be something particularly discreditable, something altogether apart from such diseases as consumption. Dr. Thurnam referred to that fact, and quoting what Sir James Mackintosh wrote to the celebrated Robert Hall, "Whoever has brought himself to consider a disease of the brain as differing only in degree (as regards the importance of the organ affected), from a disease of the lungs, has robbed it of that mysterious horror, which forms its chief malignity;" says, "By these remarks it is far from being intended to recommend the premature removal of persons attacked by mental derangement or by delirious excitement to hospitals for the insane. Such a course, in many cases, is altogether unnecessary, and in some would be positively injurious; and it should rarely, if ever, be resorted to, except under the advice of a judicious medical practitioner." These were the same sort of views, he thought, which should commend themselves to the members present. But how was a practitioner to be taught if he only followed the study of insanity theoretically? He therefore thought the meeting would do well to commend to the Managers of the Royal Infirmary to set apart wards suitable for the treatment of the cases forced on the institution according to past experience—not to establish an asylum, but to have wards for the reception of those cases which must be forced upon the attention of a private practitioner, and have special provision for the instruction of the great body of medical students. Insanity was usually included in a course of medical lectures, but in the lectures he gave on the subject, he found it utterly impossible to teach without bringing the students in contact with the insane, and illustrating cases to them, and when he did so he went to an asylum and saw, cursorily, the progress of mental disease. The various causes of mental disease ought to be made a subject for the examination of students; and something more was required of them than answers to questions such as the following, which he found were put to students in moral philosophy:—"How does Aristotle define virtue? State carefully the precise meaning of *μεσότης* and *ὁ φρόνιμος*, and the influence of these ethical conceptions upon the definition of virtue, and upon Aristotle's ethical theory in general?" (laughter). "How far were ancient philosophers justified in connecting the idea of moral depravity with their conception of matter?" (laughter). In concluding, the learned gentleman referred to the increase in the number of cases of insanity, and said he thought the members of the association would do service to the public and greatly advance the interests of medical science, by adopting resolutions to the effect that provision should be made for clinical instruction in the classes of cases received in the wards of the Infirmary to which he had referred; that medical students should be required to attend hospitals for the insane, and that there should be an examination of each in that special department of science to see whether he was fitted for the performance of his important duties. (applause).

Dr. SIBBALD (having been invited by the Chairman to give some information with reference to the system of instruction in mental diseases adopted at Berlin), said that after the manner in which the subject had been treated by the chairman he had really nothing to add. He certainly thought it would be a great advantage, were they to do anything which would have as its result the association of diseases exhibiting mental symptoms with diseases exhibiting symptoms of any other kind, and that they should, as far as possible, identify the teaching of their special department of medicine with other branches of medicine, as being a necessary part of the whole. He thought that from the manner in which the subject was taught at Berlin, it had perhaps arrived there at the most perfect form which was known at present, of teaching insanity as a branch of medicine. Professor Westphal had under his charge wards in the Charité at Berlin, devoted to diseases of the nervous system not complicated with mental symptoms. He had also wards into which were received diseases of the nervous system exhibiting mental symptoms—that was to say, as they would ordinarily name them, cases of insanity. The wards into which the insane patients were received, were practically an asylum, with full asylum administration, in so far as that was

necessary for the treatment of acute diseases. Only recent cases were admitted, and consequently the students saw the cases which they were most likely to meet with in practice. When cases threatened to become chronic, they were transferred to the district asylum. He, therefore, having been impressed with the importance of teaching in the way in which it was carried on in Berlin, had very great pleasure in supporting the proposal of the chairman, with this exception, that perhaps their function would be more properly performed if they confined themselves to saying that clinical teaching of insanity should be made an imperative part of medical education. The part bearing upon the organization of any hospital, he should say, was a matter of detail that perhaps they should not venture upon. If they insisted upon a general principle, and enforced it by every means in their power, by representations to the educational bodies and to the General Medical Council, they would perform their function in a more satisfactory manner than by interfering with details in the operations of any special institution. That was the only modification he would suggest in regard to anything the chairman had said; and he had great pleasure in supporting everything else he had said, which was only carrying out what he (the chairman) had already done so much to aid—the association of the treatment of insanity with the treatment of other forms of disease.

Dr. LOWE thought if the association aimed at too much at once it would very much defeat its own purpose; and, considering the number of subjects of medical study, at present he thought they should not do anything that would have that effect. On the other hand, he felt, and he thought, without the smallest disparagement to their professional brethren throughout the country, all present would agree with him, that they constantly met able medical practitioners in general who were thoroughly "thrown out" when they had the case of an insane person. His idea was that it would be the greatest boon to them as an association, to the public at large, and especially to the insane, if such wards could be established as the chairman had alluded to. He would have the instruction, more especially clinical instruction, attended only by voluntary students; and he hoped some day that the patients transmitted to asylums would be transmitted only on the certificates of those who volunteered to be students in those wards. That might be a very radical idea, but eventually, he thought it would be a very sound one. To attempt to carry out the whole of what was proposed at this early stage of the association, and the crude state in which matters stood with regard to the medical bill and other things, would, he thought, be too much at present. They would require to go carefully, step by step, and he would not make the attendance at these wards, which they hoped to see, imperative.

Dr. SKAE said he concurred with all that the chairman had said in regard to the important matter which he had brought forward, but differed somewhat in regard to some of the details he had suggested. In regard to the wards of the Royal Infirmary, he certainly agreed with the chairman that for the cases received there, such as delirium tremens and incipient insanity, the accommodation was exceedingly bad, and the service and administration provided for them equally bad. Many such cases were frequently sent out and placed under his care, and having been treated in the hospital for days and weeks, were brought in a state of great exhaustion, sometimes wounded and injured from want of skill, nursing, and proper accommodation. He agreed with the chairman that it was desirable suitable accommodation should be provided in the hospital for such cases as were necessary to be sent there. At the same time he did not go so far as the chairman did in regard to clinical teaching. He thought such instruction in an asylum, as was stated by Dr. Sibbald to be existing at Berlin, attached to the infirmary would be a great improvement. But he would be against the sending of cases of insanity to the general hospital, where they would not have the same advantages in the way of treatment as they had in an asylum, regularly constructed to receive cases of insanity, provided with full appliances, skilled nurses, airing courts, and amusements. He thought anything to encourage a retrograde movement in that respect would be injurious. As Dr. Thurnam stated, the earlier a case is sent to the asylum the greater the probability of cure; if treated at home, the probability was that the chances of cure were much diminished. He would cordially concur in any proposal for a memorial to the General Council, to the effect that it was very desirable that the teaching of the subject of insanity to medical students should be made imperative. Perhaps the Medical Council would not be inclined to concede this, as the feeling seemed to be general that the medical student was at present overburdened by the classes he had to attend. Still, he would not be debarred by this from presenting such a memorial. He did not think anything

could be more important to medical students than the study of mental diseases. Why men should be called upon to attend a six months' course of midwifery, which must be drawn out by a great number of stories to fill up the time, and amuse the students (laughter), when the whole subject could be taught with great ease in two or three months, he could not conceive. The subject of therapeutics also, he thought, might easily be taught in three months; and he could not conceive why students should not be taught to treat diseases of the mind. A great many diseases of the body were taught two or three times over in two or three different classes. The subject of Hernia, which a man might seldom see, was taught in some four or five classes, but Insanity, which would come under his notice every week, was not taught at all. He thought they should adopt a memorial to the General Medical Council that the teaching of insanity should be made imperative in their schools.

Dr. SIBBALD moved the following resolution :—“That a memorial be presented to the General Medical Council, expressing the strong opinion of the meeting on the necessity of making the clinical teaching of insanity imperative in every medical curriculum.”

Dr. SKAE seconded the motion.

Dr. CLOUSTON said he supposed they were all aware that a member of the General Medical Council, Dr. Rumsey, of Cheltenham, was making a strong effort to train a body of experts for analysis in cases of poison, and all sorts of special subjects. Might it not be well they should engrave their plan on his one, and strengthen his hands in the General Council, by making insanity one of the subjects he is endeavouring to train experts for? They, supposing that medical students had enough to study at present, found it necessary to do something; and perhaps the best plan at present was to train a special body of men, in order that their opinions might be consulted on all cases of a special character. It would probably strengthen that gentleman's hands, and do more practical good if they were to memorialise the General Council in accordance with Dr. Rumsey's plan.

Professor BALFOUR stated that he thought they all must agree that it was of great importance mental diseases should be studied by medical men, and that the best course for the meeting to follow might be to leave the General Medical Council to devise some plan for carrying it out. With reference to what the Chairman had said as to the examination of students in moral philosophy, the paper he had got was not a good example. It was meant for the preliminary examination before entering on the study of medicine. The questions put to the higher classes were of quite a different character.

Dr. HOWDEN (Montrose Asylum) quite agreed with what had been stated, that now was the time to agitate this question to have insanity taught as a branch of medical study. Perhaps the managers of the Royal Infirmary might agree to have those wards attached which Dr. Laycock considered necessary. In the first place, however, it would be desirable to memorialise the General Medical Council.

The CHAIRMAN said that so far as regarded the subject of having wards where facilities might be given for students acquiring a knowledge and treatment of the cases taken to the infirmary, the subject had already been fully discussed in some quarters of the city, and he had reason to hope that proper steps would be taken for that purpose; so that he did not think it was very necessary he should urge the meeting to press the matter upon the managers of the Infirmary. His feeling was that they would have strengthened the hands of the managers who were in favour of improved wards. The question, then, simply resolved itself into how they should influence the conduct of those parties who had the guidance of medical education. He thought they were unanimous in holding clinical teaching in insanity to be imperative in every medical curriculum, and he felt that, besides intimating their opinion to the General Council, they should send it to everybody which could have any force.

The motion of Dr. Sibbald was amended as follows, and carried unanimously :—

“Resolved, that this meeting desire to express a strong opinion of the necessity of making clinical teaching of insanity imperative in every medical curriculum, and request the Secretary to send a copy of this resolution to the Medical Faculties and University Courts of Scotland, the Boards of Examiners in the Universities of Scotland, and the members of the General Medical Council.”

THE COTTAGE SYSTEM OF MANAGEMENT OF LUNATICS.

Dr. TUKE (secretary) read a paper on “The Cottage System of Management of Lunatics as practised in Scotland, with Suggestions for its Elevation and Improvement.”

(Dr. Tuke's paper is given in Part I., Original Articles, of this number of the *Journal of Mental Science*.)

Dr. HOWDEN said that after receiving Dr. Tuke's circular about the business to come before the meeting, he looked over certain statistics regarding the Montrose Asylum, where, within the last ten years, several cottages had been connected with the asylum with the view of boarding patients. He was very sanguine before the houses were built, that he would be able to board out a large number. The demand for accommodation in Forfarshire was very great, and they had tried by every expedient to keep down the numbers of inmates of the asylums, either by sending them out to different localities, or to these cottages. Altogether there had been 33 patients boarded in these cottages; of these, 13 were convalescent patients. Fourteen of the patients sent out had to be returned from one cause or another. One thing he was struck with, was, that all the patients preferred to be in the asylum to being in the cottages. It was contrary to his idea, thinking that they would prefer to be in the cottages. He had, however, found that the patients in the asylum preferred being in the asylum to being in the cottages. He could not give any very satisfactory explanation why that should be. They had every advantage in the cottages of good diet, good clothing, &c., and he had endeavoured to make it worth while, on the part of the attendants, to take them out. He paid the attendants 7s. per week for the maintenance of these patients, besides their clothing and washing in the asylum; and they had perfect liberty to go where they chose, except going long distances. The matter had been brought under the notice of the Commissioners, and he had received a letter from Sir James Coxe on the subject. Sir James said: "I have been thinking a good deal over the causes of the failure of your cottage experiments, and am inclined to ascribe it to this, that your patients are neither asylum patients nor properly private patients. They are removed from the asylum and have not the interests of home. They are out of the asylum and yet in it; not free to move about; not in the way of the interests of village life; not part and parcel of the community." Now he thought that was probably true; but he did not know that the patients would be much more at home in a village such as Dr. Tuke had described. Still, he thought that the class of patients suitable for cottage accommodation were different from those they found in the asylums; and he did not think that the great proportion of patients in the asylums were suitable for boarding. Still, he thought with the Commissioners, that there was a large class who might be kept in cottages, and at a very moderate rate of board.

Dr. SIBBALD said, that in Dr. Tuke's calculation of expense, he had not included the expense of building asylums, which was about £120 a head, and represented £10 a year. Then Dr. Tuke remarked on the absence of baths. Now he believed it was absolutely necessary that in asylums bathing should be very carefully attended to; but in communities of a different character—in the ordinary village community—he would like to know what were the statistics of bathing among the more respectable portion of their village population? He thought that if they provided for their lunatics in a way similar to what they did for the more respectable of the village population, they would do very well; and he certainly did not think that bathing once a month, or anything half so often, was the rule in the village population. In fact, to go higher than their village population, he was afraid that the statistics might not be satisfactory. (A laugh) So he thought that it was unnecessary that in cottage accommodation they should insist on some of these matters.

Dr. TUKE said that the necessity of bathing was not so imperative where the patient was frequently supplied with clean sheets and clothing; but bathing was always attended to scrupulously in asylums, and in cottages sheets were not always so clean as they might be; and the patients, therefore, all the more required bathing. He thought that Dr. Sibbald had proposed a retrograde step.

Dr. SKAE said that even in cases where considerable board was paid for lunatics, and where one would expect that the patient, in these circumstances, would be well cared for, his experience was that such was not the case. The system of cottage accommodation required the most careful supervision. He thought that the class of patients that were fit for cottages were the very class that did not care for them.

Dr. JAMIESON said that his own experience of cottages was not very great, but he would never put patients in cottages if he could put them in the asylum.

THE MEDICAL TREATMENT OF INSANITY.

Dr. CLOUSTON then read a paper on "The Medical Treatment of Insanity."

(*Dr. Clouston's paper will be published in the April number of the Journal of Mental Science.*)

Dr. SKAE said he had listened to the paper with great interest indeed. He agreed with Dr. Clouston in the view he took of the subject. There was, in his opinion, no question of more importance than the subject of therapeutics. They had had remedies in vogue for a thousand years that were now looked upon as perfectly innocuous, and had been thrown aside. He believed that there was no method by which they could arrive at accuracy with regard to medicine and the treatment of diseases so well as by the numerical one which Dr. Clouston recommended. He thought the first and great difficulty was one which Dr. Clouston had pointed out. His sixth difficulty was as to their ignorance of the natural history of those diseases which he proposed to treat. They certainly would require to study the natural history of those groups which he selected, to a certain extent, before they could say what the effect of their medicines were. That was the only way that they could arrive at any definite results; and he thought that members of the association ought to treat various parts of insanity according to that method—some taking up one form, and others another form, and trying the effects of certain remedies upon them.

Dr. TUKE said he thought it would be of great importance if three or four members were to unite for the purpose of considering some plan for carrying out Dr. Clouston's suggestions, and report the result of their deliberations to next meeting.

Dr. HOWDEN said he wished to ask with regard to the natural history of the diseases, whether they would be justified in trying to see how many would die, how many would recover, and how many would be demented. Were they not bound to do all they could to promote the recovery of the patients?

Dr. SKAE said his opinion was that, according to the darkness they were in, if left alone there might be as many recoveries as otherwise.

Dr. SANDERSON thought that Dr. Clouston should draw out a brief paper embracing those particular cases that he wished them to treat.

Dr. SKAE suggested whether it would not be better to ask the members of the Association to experiment on certain remedies. He himself had made a series of experiments with a battery containing sixty cells, passing strong currents of electricity through the brain; and also another experiment passing currents of galvanism through the pathetic system of nerves. He was keeping a careful record of the results; and he had great reason to hope that galvanism might be useful in the treatment of various parts of insanity. He would be willing to act along with Dr. Clouston; and if that gentleman would correspond with the members and get each of them to take up certain remedies, in that way he thought they might arrive at good results.

Dr. WOOD, Newcastle, said he would be happy to do anything in his power to promote the object in view.

Dr. CLOUSTON said that the object of the paper was to get a committee formed; and if such a committee was appointed he was prepared to conduct whatever correspondence would be required.

The following committee was then appointed to carry out the suggestions in the paper;—Dr. Clouston, Dr. Howden, Dr. Tuke, Dr. Skae, and Dr. Smith, of Durham—with power to add to their number.

THE HEREDITARY NATURE OF CRIME.

Dr. BRUCE THOMSON then read a paper on "The Hereditary Nature of Crime"

(*Dr. Bruce Thomson's paper is given in Part I., Original Articles, of this number of the Journal of Mental Science.*)

Dr. JAMIESON (who temporarily occupied the chair), said he did not exactly see that criminals were a hereditary class; but the subject was quite new to his mind.

Dr. CLOUSTON said he was sure they were all exceedingly obliged to Dr. Thomson for his paper, which had strengthened the former impression on their minds that there was a strong connection between crime and insanity. He (Dr. Clouston) knew the governor of Carlisle gaol; and he used to be shocked at the dogmatic way in which that official spoke of the reformation of a criminal. He said "You may preach to him as you like; but he was born a criminal and he will die a criminal." That gaoler was a shrewd man, and he did not seem to be far wrong in his opinion. He thought it would be an interesting question not only to inquire as

to the number of the criminal class who became insane, but to trace out the matter, and see how that criminal propensity affected the insanity. The governor of Carlisle gaol told him that the way in which a criminal submitted to a policeman was a diagnostic mark of a born criminal; that the sort of instinctive reverence those classes had for a policeman in Liverpool and London was quite diagnostic. (Laughter.)

Dr. TUKE said it appeared to him that Dr. Thomson had fully made out his case as to the hereditary nature of crime. If his statements were correct, they ought certainly to have a great bearing on legislation and prison management.

OBSERVATIONS ON THE DEATH-RATE OF THE INSANE.

Dr HOWDEN, Montrose Asylum, then read a paper on "The Death-Rate of the Insane."

Dr. JAMIESON maintained that the patients in Aberdeen Asylum were well dieted.

Dr. HOWDEN said that might be so now, but at one time the diet appeared to him to be low.

Dr. JAMIESON said it might appear to be low in point of butcher's meat, but it was a very large diet, and given *ad libitum*. A good deal of the diet of the pauper patients was of oatmeal and milk, which was a very good diet. He thought the separation of the patients into single rooms had a good effect, and he found that the mortality in such cases really was low. Dr. Howden told them that in Montrose when the patients were in the old asylum and in separate rooms, that that was not the case, but the old asylum was a bad machine. Then again, as to the Banff Asylum, where they were told the mortality was low; although there were no single rooms, it was newly opened, and only held from 60 to 70 patients. He was inclined to think a large proportion of separate rooms contributed to rule the mortality in Aberdeen. Another fact of great importance was that all the day rooms were on the ground floor, and patients could go in and out as they chose, and were very much in the open air. A good deal of the want of phthisis in the asylum arose, he thought, from the circumstance that the patients were much outside, that that together with the facts that they were well dieted, well cared for, and had a large portion of them separate rooms to sleep in at night, were circumstances to which he would chiefly attribute the low mortality in Aberdeen Asylum.

Dr. HOWDEN said he had taken a period of the Montrose Asylum as the only one during which there was a medical superintendent and no dormitories. As to the Aberdeen Asylum, he quite believed there was, to a certain extent, truth in what Dr. Jamieson said in regard to the causes of the low mortality, and the object of the paper, as he had said, was one rather to promote discussion than anything else. But he did not think the diet of Aberdeen Asylum was any better than that in Edinburgh, Glasgow, or Montrose, at the present moment.

Dr. TUKE said that with reference to the Fife Asylum, Dr. Howden was scarcely correct. In addition to the good situation and excellent drainage of the asylum, he must attribute the low mortality to the large supply given the patients of oily food. Besides receiving a supply of pork, they had Irish stew, and make use of a large amount of dripping. Phthisis is almost unknown, and the death is only 8·5.

Dr. HOWDEN said the death in the Montrose New Asylum was only 7 per cent.

Dr. TUKE said there were accidental circumstances which increased the rate. Seven persons came in moribund, and five died in a month.

Dr. CLOUSTON said that in Carlisle Asylum, which had now been opened for seven years, its mortality had been 7½ per cent., which, but for an epidemic of dysentery, would have been reduced rather below 6½ per cent., and that, compared with other English and Scotch Asylums, was very low indeed. The situation of the asylum quite bore out the theory which Dr. Howden had put forth. He had no doubt the epidemic of dysentery to which he had referred was entirely owing to sewage exhalations. The sewage was at that time run on to a clayey field, and finding on one morning eight cases of dysentery, he ascertained that for four days the wind had been blowing from that field. On going to it he found it smelling very badly, and on the second day he had a smart attack of diarrhoea and dysentery of a character with that by which the patients were affected. He had no doubt that cold weather caused dysentery.

Dr. HOWDEN said that open sandy soils took up much more of the organic matter in sewage than clay soils did. He believed about fifty per cent. of the sewage passed away into the drains in clay soils.

Dr. BRUCE THOMSON said one thing which had struck him was that there was no rule generally adopted with regard to diet. No doubt there was provision made for securing that an adequate diet should be given, but it might differ in the several localities. If milk were given, that was adequate, in his opinion, to butcher meat. A good diet was of all things he knew of the best thing for keeping up the general health, and preventing attacks and epidemics of dysentery, diarrhoea, fevers, and scrofula. For the last twenty years the death-rate in the General Prison at Perth had been exactly 15 per thousand, or $\frac{1}{2}$ per cent., and that, too, of a class of people who were utterly deteriorated. There was not a single case of the prevailing epidemics that was ever seen within the walls of the prison; and he thought that the results shown in the returns of that prison were sufficient to prove that a regular dietary should be established in all public institutions. The results of the system followed in that prison as regarded the reduction of disease, the amount of work done, and the reduction of the death-rate, were really remarkable.

Dr. CLOUSTON asked how that death-rate contrasted with the other convict prisons and county jails?

Dr. BRUCE THOMSON said he believed the rate seldom exceeded two per cent.

Dr. SIBBALD asked the ages of the prisoners. He thought that bore some importance in collecting death-rate statistics.

Dr. BRUCE THOMSON said that they had fifty juveniles under 15, but that the average age was from 25 to 30.

Dr. HOWDEN—That is the most favourable age for the continuation of life.

The CHAIRMAN said he had listened with great interest to the discussion which had taken place, and it struck him all that had been said illustrated the importance of this department of medicine in relation to all others. As to hospital statistics, and the construction of hospitals, they found what various sources there might be of mortality. It was more than twenty years ago since he showed by a diagram, taking the temperature from March, 1846, to 1847, that mortality was affected by it, and that diarrhoea had a distinct relation to the temperature, and also to the rainfall. In that year there had been but little rainfall up to the second week of August, and the sewers had got full, but a heavy thunderstorm having come on, the result was observable immediately, and the mortality returns from diarrhoea fell in the next week. Cold, no doubt, was a very common cause of dysentery, but it was generally in the autumn, after the heat of summer. He did not think that it produced dysentery in the spring, after a cold winter. The question of drainage, which Dr. Howden referred to, and the confirmation given by Dr. Clouston's remarks, in reference to clay soils, was, he thought, of great importance. He did not know a more important social question as regarded towns than the disposal of excretions, and the observations he had made were that those low lying clay soils were, somehow or other, connected with the existence of fever. There was no doubt such soils did not take up and decompose the elements and particles of the sewage. He supposed the reason why the Craigentumy meadows, near Edinburgh, were so productive and harmless, was just because the soil of them was dry.

The business having now been brought to a close,

The CHAIRMAN said that the meeting had been highly favoured by the President and Council of the Royal College of Physicians, who had placed at their disposal the beautiful hall in which they had met. (Applause.) He would propose that the secretary should communicate their cordial thanks to the President and Council of the College for their hospitality. (Applause.)

The proposal was cordially agreed to.

On the motion of Dr. HOWDEN, a vote of thanks was given to Professor Laycock for presiding, and the proceedings terminated.

In the evening the members of the Association dined with Dr. Skae, on the invitation of the Directors of the Royal Edinburgh Asylum for the Insane.

CORRESPONDENCE.

On the Treatment of a Certain Class of Destructive Patients.

I.

Middlesex County Lunatic Asylum,
Colney Hatch, N., December 10th, 1869.

SIR,—In some correspondence which has lately passed between the Committee of Visitors of this Asylum and the Commissioners in Lunacy on the subject of providing bedsteads and bedding for patients of a wilfully destructive nature, the Commissioners have expressed themselves as strongly of opinion that the practice, occasionally resorted to at this asylum, of taking away, for a limited period of time, the usual bedsteads and bedding from such patients who persistently destroy them, and putting them in single rooms with an ample supply of strong quilted rugs, is “unjustifiable in any case.”

As a guide to them in their future action in these cases, the Committee would feel much obliged by your informing them what is the course pursued at the Asylum under your charge; and they desire me to ask you to favour them with a description of the mode of treatment you adopt in the cases of patients who without being under the effects of any sudden paroxysm, are so violent and destructive as persistently to break up the bedsteads and tear in pieces the bedding with which they are supplied. The Committee specially desire information whether in the event of patients destroying their bedding in the early part of the night, the same is renewed to them as often as they destroy that which had been previously supplied, or whether they are left without any bedding for the remainder of the night on which they have exhibited their destructive tendencies.

To prevent any misapprehension as to the practice adopted at the Colney Hatch Asylum, I beg to inform you that when the ordinary bedding is taken away from the patients, they are, in lieu thereof, supplied with three warm quilted rugs which, if used, afford them ample protection against the cold, and of which, after attempting in vain to destroy them, they usually avail themselves as a covering.

The favour of an early reply will oblige the Committee.

I am, Sir,

Your obedient Servant,

JOHN S. SKAIFE,

Clerk to the Visitors.

To the Superintendent of the Sussex Asylum.

II.

Sussex Lunatic Asylum,
Hayward's Heath, December, 15, 1869.

SIR,—I had the honour to receive this morning your letter, dated December, 10th, making enquiries relative to the treatment of a certain class of destructive patients in this Asylum.

I most strongly, after an experience here of ten years, endorse the opinion of the Commissioners in Lunacy to which you refer, that it is unjustifiable in any

case to place patients of destructive habits, even for a limited period in seclusion, without clothing or bedding, although an ample supply of strong quilted rugs be, as you say, given. A patient placed as you describe, reminds me of Hogarth's picture of Old Bedlam in "The Rake's Progress." The authorities then allowed straw instead of strong quilted rugs.

This question which you now re-open, was brought before the profession by the Medical Superintendent of the male department of Colney Hatch, in a paper which he published in the "Journal of Mental Science" for April, 1867, "*On the treatment of a certain class of Destructive Patients.*" His views were, to my judgment, refuted in a paper by my colleague, Dr. S. W. D. Williams, in the July number of the same Journal, "*The non-restraint system in the treatment of a certain class of Destructive Patients.*"

Dr. Sheppard replied to this in the October number, "*Some further Observations in reply to Certain Strictures upon the treatment of a certain class of Destructive Patients,*" and he was again finally answered by Dr. Williams in the next number (January, 1868). This paper contained, also, extracts from various Continental and American Reviews, condemnatory of Dr. Sheppard's views.

I take the liberty of transmitting with this letter the numbers of the *Journal of Mental Science* containing these papers.

Dr. Sheppard's practice was also strongly censured by Professor Dr. Westphal in Germany, after his visit to England. It would, indeed, be difficult for me to convey to the Visitors of Colney Hatch, the extent of injury which the publication of Dr. Sheppard's paper inflicted on the progress of the non-restraint system on the continent, and I fear, from the tenour of your letter, that he still persists in his ill-advised course of treatment in these cases. I sincerely trust that the information which your circular will elicit, may induce the Visitors at Colney Hatch, entirely to discontinue the practice advocated by their Medical Superintendent.

II. With regard to the practice followed in this Asylum, in the treatment of a certain class of destructive patients, I would refer you to Dr. Williams's papers, already noticed, in which, I venture to think, the Visitors at Colney Hatch will find my plan of treatment clearly explained, with illustrative cases. Should any question arise thereon, I need scarcely say how gladly I shall furnish any further details.

As the Visitors at Colney Hatch appear desirous of learning the opinion of the Medical Profession on this question, I may perhaps be permitted to conclude this letter with a short paragraph which I translate from a paper I received in October last, from Professor Westphal, on the use of the hydrate of chloral. "The therapeutic value of this remedy (the hydrate of chloral), has been discovered exactly at the right moment, and enables us to give the last final blow to the practice of restraint in Germany. The adherents of that system have always brought forward cases of destructive mania, with attempts at injury, as those in which restraint is absolutely required. In these instances, the soothing sleep produced by this remedy will replace the restraint, and similar will be its results in the mania of General Paralysis attended with destructive violence."

I have the honour to be, Sir,

Your most obedient servant,

C. LOCKHART ROBERTSON,

M.D., F.R.C.P.,

Medical Superintendent.

John S. Skaife, Esq.,

Clerk to the Visitors,

Colney Hatch Asylum.

Junius Brutus Booth v. John Wilkes Booth.

To the Editors of the Journal of Mental Science.

GENTLEMEN,

I notice a very strange mistake by Mons. Brierre de Boismont, which is translated and repeated on page 412 of the October number of your Journal.

On my authority, Junius Brutus Booth, who died in 1852, is made the murderer of President Lincoln, in 1865. Whereas the truth is, President Lincoln (as we supposed all the world knew), was assassinated by John Wilkes Booth, a son of the distinguished actor, Junius Brutus Booth.

Will you, in justice to the memory of the father, who, though insane, we believe was a good as well as a great man, place this crime where it belongs—on the son—for whom even the excuse of insanity, we believe, has never yet been claimed.

Yours very truly,

A. O. KELLOGG.

State Asylum, Utica, New York, U.S.A.,
Oct. 13th, 1869.

Books, Pamphlets, &c., received for Review, 1869.

(Continued from *Journal of Mental Science, October, 1869.*)

The Literature and Curiosities of Dreams: a commonplace book concerning the Mystery of Dreams and Visions, &c. By Frank Seafield, M.A. New and revised Edition, complete in one vol., post 8vo. Lockwood and Co., 1869.

Will be reviewed in our next number (April, 1870).

The Pathology and Therapeutics of Mental Diseases. By J. L. C. Schroeder van der Kolk, Professor of Physiology in the University of Utrecht. Translated from the German. By James T. Rudall, F.R.C.S., Surgeon to the Melbourne Hospital, Victoria. John Churchill and Sons, New Burlington Street, 1869.

We reviewed this work on its appearance in Germany. See *Journal of Mental Science, October, 1863.* It is interesting to observe the presence in Melbourne of a student in Psychology, who has well performed a task, which in England we have omitted, of placing this last work of Professor Schroeder van der Kolk within reach of English readers.

A Physician's Problems. By Charles Elam, M.D., M.R.C.P. Contents: Natural Heritage—On Degenerations in Man—On Moral and Criminal Epidemics—Body v. Mind—Illusions and Hallucinations—On Somnambulism—Reverie and Abstraction. Crown 8vo. Macmillan and Co., London, 1869.

Will be reviewed in our next number (April, 1870).

Winter and Spring on the Shores of the Mediterranean: or, the Riviera, Mentone, Italy, Corsica, Sicily, Algeria, Spain, and Biarritz, as Winter Climates. By J. Henry Bennet, M.D. Fourth Edition, considerably enlarged, with Coloured Maps and Wood Engravings. John Churchill and Sons, New Burlington Street, 1869.

Valuable as a guide to those in search of health. It is, moreover, beautifully got up.

Strong and Free; or, First Steps towards Social Science. By the Author of "My Life, and what shall I do with it?" &c., &c. London: Longmans, Green, and Co., 1869.

"The final cause of all science and all philosophy is the enrichment of human life; the quickening of its powers; the enlarging of its capacities; the making it in some respect or other mightier, fairer than before."—DR. MAGEE,

Will be reviewed in our next number (April, 1870).

The Principles of Medical Science and Practice. A Lecture given in King's College, London, at the opening of the Medical Session, 1869-70. By George Johnson, M.D., F.R.C.P. Lond.; Professor of Medicine in King's College, and Physician to King's College Hospital. London: Robert Hardwicke, 192, Piccadilly, 1869. Pamphlet.

The most interesting introductory lecture of the season.

The Practical Nature of the Theological Writings of Emanuel Swedenborg, in a Letter to his Grace the Lord Archbishop of Dublin. By the Rev. Augustus Clissold, M.A., formerly of Exeter College, Oxford. Second Edition, revised and enlarged. London: Longman, Green, Longman, and Roberts, Pater-noster Row, 1860.

A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M.D., Physician to the Victoria Hospital for Sick Children. London: John Churchill and Sons, New Burlington Street, 1869.

Novus Thecetelus; or, Sense and Science. Being the Introductory Address delivered at St. Thomas's Hospital, October 1st, 1869. By William H. Stone, F.R.C.P., &c., formerly Scholar of Balliol College, Oxon. London: John Churchill and Sons, New Burlington Street, 1869.

A most scholarlike production.

Is Vaccination Injurious? A Popular Essay on the Principles and Practice of Vaccination. By Henry Alleyne Nicholson, M.D., D.Sc., M.A., &c., Lecturer on Natural History in the Extra-Academical School of Edinburgh; Ettles Medical Scholar in the University of Edinburgh, &c. London: Churchill and Sons, New Burlington Street. Manchester: A. Ireland and Co., Pall Mall, 1869.

Cuique in suâ arte credendum.

Comparative Metaphysics. 1. Method, the reverse of that of Science, argued to be the means, in reality, to the deepest kind of Harmony with Science. By Sara S. Hennell, Author of "Present Religion," &c. London: Trübner and Co., 60, Paternoster Row, 1869.

Die Hirwindungen des Menschen nach Eigenen Untersuchungen insbesondere über die Entwicklung Derselben beim Fötus, und mit Rücksicht auf das Bedürfniss der Arzte. Dargestellt von Alexander Ecker, Professor der Anatomie und vergleichenden Anatomie an der Universität Freiburg. Mit in den text Eingedruckten Holzstichen. Braunschweig: Druck und Verlag von Friedrich Vieweg und Sohn, 1869.

On Aphasia, or Loss of Speech in Cerebral Disease. By Frederic Bateman, M.D., M.R.C.P., Physician to the Norfolk and Norwich Hospital. Geo. P. Bacon, Lewes. Reprinted from the "Journal of Mental Science."

We are glad to receive this reprint of Dr. Bateman's interesting papers.

Address delivered by Isaac Ray, M.D., of Philadelphia, on the occasion of Laying the Corner Stone of the State Hospital for the Insane, at Danville, Pa., August 26, 1869. Harrisburg: Theo. F. Scheffer, Printer, Bookseller and Stationer, 1869.

Prostitution, considered in its Moral, Social, and Sanitary Aspects. By William Acton. Second Edition, entirely re-written, 8vo., cloth. John Churchill and Sons, New Burlington Street.

Contains a mass of statistical information relating to this unsolved social problem.

A Copy of the Statistical Report of the Health of the Navy for the year 1867. Ordered by the House of Commons to be printed. 22nd April, 1869.

Appointments.

Professor LAYCOCK, President of the Medico-Psychological Association, has been appointed Physician Extraordinary to the Queen for Scotland.

D. M'K. CASSIDY, M.D., late Assistant Medical Officer to the Northern District Asylum, Inverness, has been appointed Assistant Medical Officer to the Criminal Lunatic Asylum, Broadmoor, Wokingham.

E. C. FOX, M.B. Edin., has been appointed Assistant Medical Officer to the Argyll District Lunatic Asylum, Lochgilphead.

T. W. MACDOWALL, M.D., late Assistant Medical Officer to the Perth District Lunatic Asylum, Murthly, has been appointed Assistant Medical Officer to the Northern District Asylum, Inverness.

G. H. PEDLER, L.S.A.L., has been appointed Clinical Clerk at the West Riding of Yorkshire Lunatic Asylum, Wakefield.

J. B. WARD, B.A., M.B. has been appointed Assistant Medical Officer to the Warwick County Asylum, Hatton.

INDEX TO VOL. XV.

PART I.—ORIGINAL ARTICLES.

- American asylums, notes of a visit to, Dr. Alexander Robertson, 49
Aphasia, or loss of speech in cerebral disease, Dr. Frederic Bateman, 102, 367
- Bacon, Dr. G. Mackenzie, translation of a paper by Mons. Brierre de Boismont, 393
- Bastian, Dr. H. Charlton, consciousness, 501
- Bateman, Dr. Frederic, on aphasia, or loss of speech in cerebral disease, 102, 367
- Blandford, Dr. G. Fielding, on insanity without delusions, 23
- Boyd, Dr. R., observations on the causes of death in chronic cases of Insanity, 196
- Brierre de Boismont, Mons., reply to the three questions of the Committee of the English Medico-Psychological Association as to the reforms to be introduced into the examination of the insane in courts of justice, translated by Dr. G. Mackenzie Bacon, 393
- Bromides, remarks on the use of, in the treatment of epilepsy and other neuroses, W. B. Kesteven, F.R.C.S., 205
- Brougham, Lord, an apology for, on psychological grounds, Dr. H. Tuke, 343
- Clarke, Dr. J. Lockhart, a case of general paralysis, with examination of the brain, medulla oblongata, and spinal cord, 499
- Consciousness, Dr. H. Charlton Bastian, 501
- Cottage system of management of lunatics, with suggestions for its elaboration and improvement, Dr. J. B. Tuke, 524
- Crime, the hereditary nature of, Dr. J. B. Thompson, 487
- Davies, Rev. W. G., the perceptive centres and their localisation, 240
- Delusions, insanity without, Dr. G. Fielding Blandford, 23
- Dickson, Dr. J. Thompson, matter and force considered in relation to mental and cerebral phenomena, 217
- Eastwood, Dr. J. W., on medico-legal uncertainties, 90
- Epilepsy, use of bromides in, W. B. Kesteven, 536
- Feigned insanity, with cases, Dr. David Nicholson, 536
- Frederichsberg asylum, a visit to, Dr. F. Oppert, 213
- Haynes, Dr. Stanley, voluntary patients in asylums, 563
- Heredity nature of crime, Dr. J. B. Thompson, 487
- Insane, examination of, in courts of justice, Mons. Brierre de Boismont, 393
- Insanity, alleged increase of, Dr. C. Lockhart Robertson, 1
- " feigned, with cases, Dr. David Nicholson, 536
- " observations on the causes of death in chronic cases of, Dr. R. Boyd, 196
- " syphilitic, a case of, Dr. S. W. D. Williams and Dr. Moxon, 119
- " without delusions, Dr. G. Fielding Blandford, 23

- Kesteven, W. B., F.R.C.S., bromides in epilepsy and other neuroses, 205
- Laycock, Professor T., objects and organization of the Medico-Psychological Association, 327
- Lunacy, alleged increase of, Dr. Frederick MacCabe, 363
- Lunatics, cottage system of management of, Dr. J. B. Tuke, 524
- MacCabe, Dr. Frederick, on the alleged increase of insanity, 363
- Management of lunatics, the cottage system of, Dr. J. B. Tuke, 524
- Matter and force considered in relation to mental and cerebral phenomena, Dr. J. Thompson Dickson, 217
- Maudsley, Dr. Henry, Emanuel Swedenborg, 169, 417
- Medico-legal uncertainties, Dr. J. W. Eastwood, 90
- Medico-Psychological Association, objects and organization of the, Professor T. Laycock, 327
- Moxon, Dr., and Dr. S. W. D. Williams, a case of syphilitic insanity, 119
- Nicholson, Dr. David, feigned insanity, with cases, 536
- Oppert, Dr. F., a visit to the Friedrichsberg asylum, 213
- Paralysis, general, a case of, with examination of the brain, medulla oblongata and spinal cord, Lockhart Clarke, F.R.S., 499
- Perceptive centres and their localisation, Rev. W. G. Davies, 240
- Physical disease from mental strain, Dr. W. Benjamin Richardson, 350
- Richardson, Dr. W. Benjamin, on physical disease from mental strain, 350
- Robertson, Dr. Alexander, notes of a visit to American asylums, 49
- „ Dr. C. Lockhart, on the alleged increase of insanity, 1
- Speech, loss of, in cerebral disease, Dr. Frederic Bateman, 102, 367
- Swedenborg, Emanuel, Dr. Henry Maudsley, 169, 417
- Syphilitic insanity, a case of, Dr. S. W. D. Williams and Dr. Moxon, 119
- Thompson, Dr. J. B., the hereditary nature of crime, 487
- Tuke, Dr. H., an apology for Lord Brougham on psychological grounds, 343
- Tuke, Dr. J. B., the cottage system of management of lunatics, with suggestions for its elaboration and improvement, 524
- Voluntary patients in asylums, Dr. Stanley Haynes, 563
- Williams, Dr. S. W. D., on a case of syphilitic insanity, with a microscopic examination of the brain by Dr. Moxon, 119

PART II.—REVIEWS.

- Brain, researches on the intimate structure of, human and comparative. Second series on the structure of the medulla oblongata, by J. Lockhart Clarke, Esq., F.R.S. Philosophical Transactions, pt. i., 1868, 144
- Brain, researches on the intimate structure of the. First series. Philosophical Transactions, pt. i., 1868, 144
- Cerveau, Le Ramollissement et le congestion du, principalement considérés chez le vieillard, par le Dr. J. V. Laborde, 456
- Conolly, Dr. John, a memoir of, by Sir James Clark. Bart., K.C.B., M.D., F.R.S., physician in ordinary to the Queen, 450
- Force and nature ; attraction and repulsion ; the radical principle of energy discussed in relation to physical and morphological development, by Dr. Chas. Frederick Winslow, 286

- Gheel, the City of the Simple, by the author of "Flemish Interior," 458
 Lunacy, state of in Great Britain and Ireland, 1868. The Lunacy Blue Books, 588
 Medulla oblongata and trapezium, the grey substance of the, by John Dean, M.D., Washington, 1864, 144
 Nervous system, illustrations of diseases of the, by Dr. J. Hughlings Jackson, London Hospital Reports, 1864, *et seq.*, 144
 Philosophical enquiry, the limits of; address delivered to the members of the Edinburgh Philosophical Institution by William, Lord Archbishop of York, 269
 Spinal cord, microscopic anatomy of the lumbar enlargement of the, by John Dean, M.D., Cambridge, U.S., 1861, 144
 Spinal cord, researches into the structure of the, by J. Lockhart Clarke, Esq., F.R.S., Philosop. Transactions, 1851, 1853, 1859, 144
 Vital and cosmical principle, on the identity of the, by Robert Lewins, M.D., 289

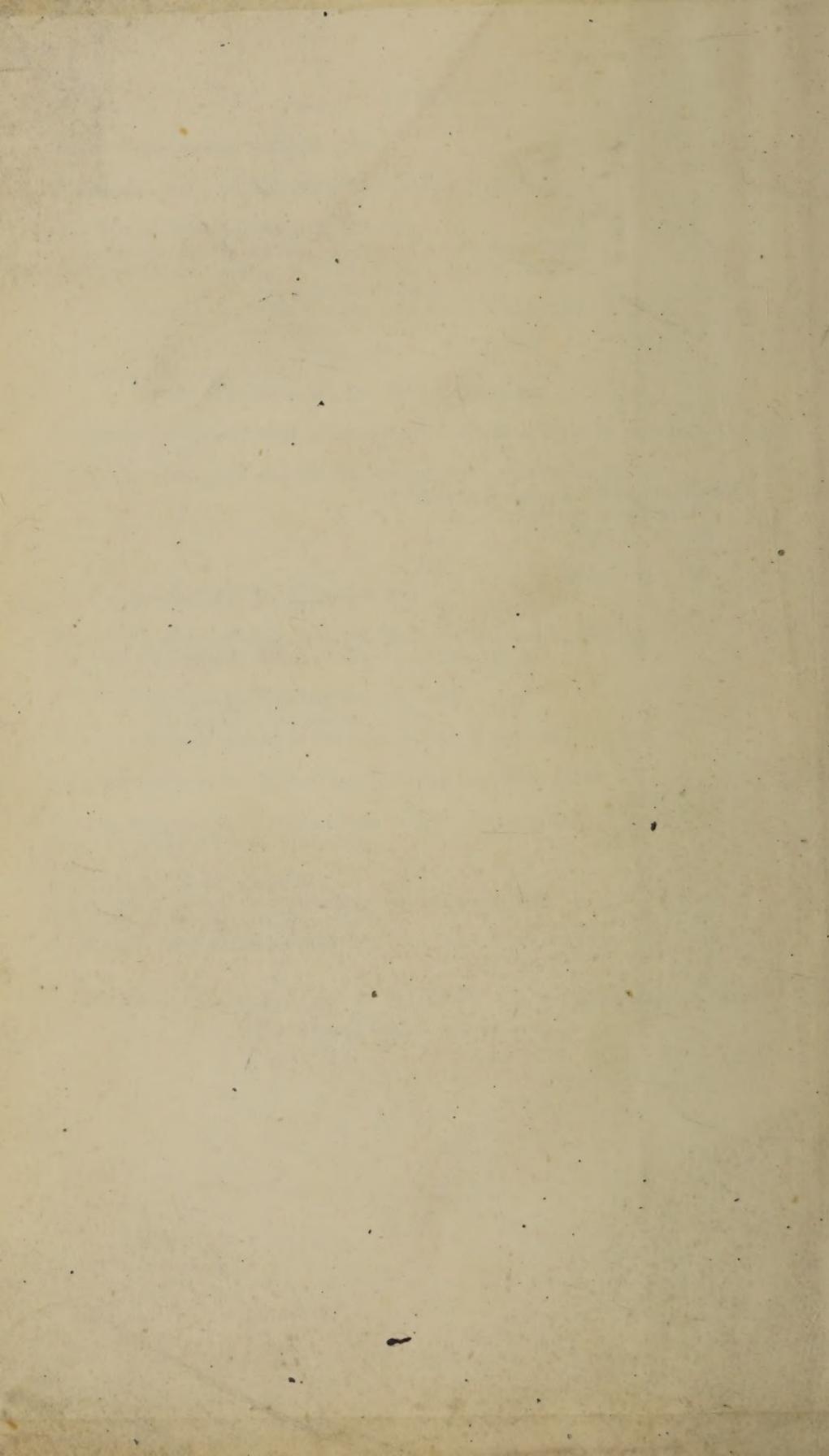
PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

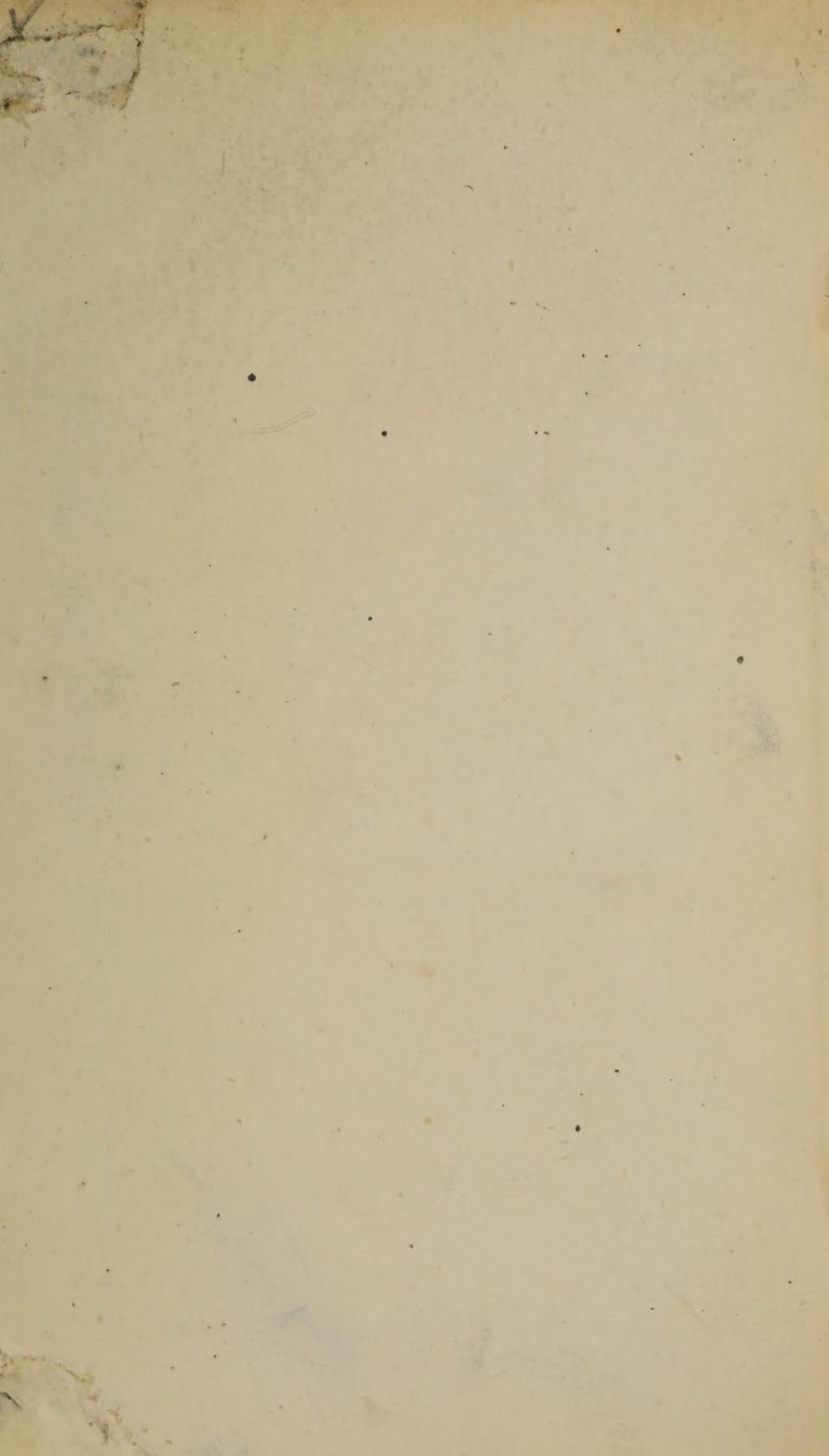
- | | |
|--|-----|
| French psychological literature, by Dr. Sibbald, | 291 |
| German " | 614 |

PART IV.—PSYCHOLOGICAL NEWS.

- Actions for alleged false imprisonment in an asylum, 127
 Appointments, 165, 324, 481, 662
 Asylums, county lunatic, under the County Administration Bill, 1869, 436
 " foreign, English patients in, 563
 " and lunacy in France, 577
 " middle-class for the insane, 585
 Books received for review, 167, 324, 482, 660
 Cerebral convulsions, the structure of, by Mr. Lockhart Clark, 137
 Clinical wards for lunatics, 581
 Correspondence, 163, 323, 477, 479, 658, 659
 Assistant medical officers of public asylums, their education, position, and pay, 163, 323
 Booth, Junius Brutus, *v.* John Wilkes Booth, 659
 Briere de Boismont, M., letter from, 477
 Destructive patients, on the treatment of a certain class of, 658
 Vital and cosmical force, letter and note, 479
 Westphal, Professor, letter from, 163
 County asylum reports, 1869, 483
 English patients in foreign asylums, 263
 Epileptic homicide, 134
 French asylums and lunacy in France, 577
 Glimpses of asylum life, the Rev. H. Hawkins, 320
 Homicide, epileptic, 134

The Editor is indebted to Dr. A. H. Newth, Sussex County Asylum, for the compilation of this Index.





XXXI

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